

Welcome to STN International! Enter x:x

LOGINID:sssptaul56cxh

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

STN
DATA Base Search
Transcript
of March 10, 2003
Cited in Search Notes
11-23-03

* * * * * Welcome to STN International * * * * *

NEWS 1 Web Page URLs for STN Seminar Schedule - N. America
NEWS 2 Apr 08 "Ask CAS" for self-help around the clock
NEWS 3 Apr 09 BEILSTEIN: Reload and Implementation of a New Subject Area
NEWS 4 Apr 09 ZDB will be removed from STN
NEWS 5 Apr 19 US Patent Applications available in IFICDB, IFIPAT, and IFIUDB
NEWS 6 Apr 22 Records from IP.com available in CAPLUS, HCAPLUS, and ZCAPLUS
NEWS 7 Apr 22 BIOSIS Gene Names now available in TOXCENTER
NEWS 8 Apr 22 Federal Research in Progress (FEDRIP) now available
NEWS 9 Jun 03 New e-mail delivery for search results now available
NEWS 10 Jun 10 MEDLINE Reload
NEWS 11 Jun 10 PCTFULL has been reloaded
NEWS 12 Jul 02 FOREGE no longer contains STANDARDS file segment
NEWS 13 Jul 22 USAN to be reloaded July 28, 2002;
saved answer sets no longer valid
NEWS 14 Jul 29 Enhanced polymer searching in REGISTRY
NEWS 15 Jul 30 NETFIRST to be removed from STN
NEWS 16 Aug 08 CANCERLIT reload
NEWS 17 Aug 08 PHARMAMarketLetter (PHARMAML) - new on STN
NEWS 18 Aug 08 NTIS has been reloaded and enhanced
NEWS 19 Aug 19 Aquatic Toxicity Information Retrieval (AQUIRE)
now available on STN
NEWS 20 Aug 19 IFIPAT, IFICDB, and IFIUDB have been reloaded
NEWS 21 Aug 19 The MEDLINE file segment of TOXCENTER has been reloaded
NEWS 22 Aug 26 Sequence searching in REGISTRY enhanced
NEWS 23 Sep 03 JAPIO has been reloaded and enhanced
NEWS 24 Sep 16 Experimental properties added to the REGISTRY file
NEWS 25 Sep 16 CA Section Thesaurus available in CAPLUS and CA
NEWS 26 Oct 01 CASREACT Enriched with Reactions from 1907 to 1985
NEWS 27 Oct 21 EVENTLINE has been reloaded
NEWS 28 Oct 24 BEILSTEIN adds new search fields
NEWS 29 Oct 24 Nutraceuticals International (NUTRACEUT) now available on STN
NEWS 30 Oct 25 MEDLINE SDI run of October 8, 2002
NEWS 31 Nov 18 DKILIT has been renamed APOLLIT
NEWS 32 Nov 25 More calculated properties added to REGISTRY
NEWS 33 Dec 02 TIBKAT will be removed from STN
NEWS 34 Dec 04 CSA files on STN
NEWS 35 Dec 17 PCTFULL now covers WP/PCT Applications from 1978 to date
NEWS 36 Dec 17 TOXCENTER enhanced with additional content
NEWS 37 Dec 17 Adis Clinical Trials Insight now available on STN
NEWS 38 Dec 30 ISMEC no longer available
NEWS 39 Jan 13 Indexing added to some pre-1967 records in CA/CAPLUS
NEWS 40 Jan 21 NUTRACEUT offering one free connect hour in February 2003
NEWS 41 Jan 21 PHARMAML offering one free connect hour in February 2003
NEWS 42 Jan 29 Simultaneous left and right truncation added to COMPENDEX,
ENERGY, INSPEC
NEWS 43 Feb 13 CANCERLIT is no longer being updated
NEWS 44 Feb 24 METADEX enhancements
NEWS 45 Feb 24 PCTGEN now available on STN
NEWS 46 Feb 24 TEMA now available on STN
NEWS 47 Feb 26 NTIS now allows simultaneous left and right truncation
NEWS 48 Feb 26 PCTFULL now contains images
NEWS 49 Mar 04 SDI PACKAGE for monthly delivery of multifile SDI results

Cynthia
Hamilton
Do
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from
file

NEWS EXPRESS January 6 CURRENT WINDOWS VERSION IS V6.01a,
 CURRENT MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP),
 AND CURRENT DISCOVER FILE IS DATED 01 OCTOBER 2002
 NEWS HOURS STN Operating Hours Plus Help Desk Availability
 NEWS INTER General Internet Information
 NEWS LOGIN Welcome Banner and News Items
 NEWS PHONE Direct Dial and Telecommunication Network Access to STN
 NEWS WWW CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that specific topic.

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* * * * * STN Columbus * * * * *

FILE 'HOME' ENTERED AT 19:09:55 ON 09 MAR 2003

=> file reg

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'REGISTRY' ENTERED AT 19:10:01 ON 09 MAR 2003

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 7 MAR 2003 HIGHEST RN 497212-14-3

DICTIONARY FILE UPDATES: 7 MAR 2003 HIGHEST RN 497212-14-3

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STN Note 27, Searching Properties in the CAS Registry File, for complete details:

<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=> s su 8/cn

L1 1 SU 8/CN

=> d

L1 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS

RN 221273-01-4 REGISTRY

CN SU 8 (photoresist) (9CI) (CA INDEX NAME)

OTHER NAMES:

CN SU 8

DR 488701-12-8

MF Unspecified
CI PMS, MAN
PCT Manual registration
SR CA
LC STN Files: BIOSIS, CA, CAPLUS, TOXCENTER, USPATFULL

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
150 REFERENCES IN FILE CA (1962 TO DATE)
150 REFERENCES IN FILE CAPLUS (1962 TO DATE)

=> s dop/cn
L2 1 DOP/CN

=> d

L2 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS
RN 117-81-7 REGISTRY
CN 1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Phthalic acid, bis(2-ethylhexyl) ester (6CI, 8CI)

OTHER NAMES:

CN 2-Ethylhexyl phthalate
CN 3315AF2
CN Bis(2-ethylhexyl) 1,2-benzenedicarboxylate
CN Bis(2-ethylhexyl) o-phthalate
CN Bis(2-ethylhexyl) phthalate
CN Bisoflex 81
CN Bisoflex DOP
CN Compound 889
CN Corflex 400
CN DEHP
CN Di(2-ethylhexyl) phthalate
CN Di(isooctyl) phthalate
CN Diacizer DOP
CN Dioctyl phthalate
CN DOF
CN DOF (Russian plasticizer)
CN DOP
CN Ergoplast FDO
CN Ergoplast FDO-S
CN Etalon
CN Etalon (plasticizer)
CN Ethylhexyl phthalate
CN Eviplast 80
CN Eviplast 81
CN Fleximel
CN Flexol DOD
CN Flexol DOP
CN Garbeflex DOP-D 40
CN Good-rite GP 264
CN Hatco DOP
CN Jayflex DOP
CN Kodaflex DEHP
CN Kodaflex DOP
CN Monocizer DOP
CN Octoil
CN Octyl phthalate
CN Palatinol AH
CN Palatinol AH-L
CN Phthalic acid di(2-ethylhexyl) ester
CN Phthalic acid dioctyl ester
CN Pittsburgh PX 138
CN Plasthall DOP

CN Reomol D 79P
 CN Sansocizer DOP
 CN Sansocizer R 8000
 CN Sconamoll DOP
 CN Sicol 150
 CN Staflex DOP
 CN Truflex DOP

ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT - Use FCN, FIDE, or ALL for
 DISPLAY

FS 3D CONCORD
 DR 8033-53-2, 126639-29-0, 50885-87-5, 109630-52-6, 137718-37-7, 40120-69-2,
 205180-59-2, 275818-89-8

MF C24 H38 O4

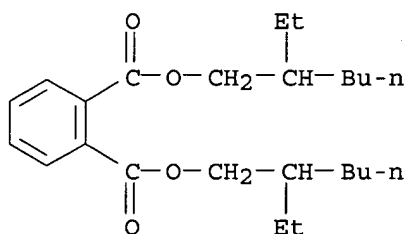
CI COM

LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOBUSINESS,
 BIOSIS, BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN,
 CHEMCATS, CHEMLIST, CHEMSAFE, CIN, CSCHEM, CSNB, DDFU, DETHERM*, DIPPR*,
 DRUGU, EMBASE, HODOC*, HSDB*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE,
 MRCK*, MSDS-OHS, NAPRALERT, NIOSHTIC, PDLCOM*, PIRA, PROMT, RTECS*,
 SPECINFO, TOXCENTER, ULIDAT, USPAT2, USPATFULL, VTB

(*File contains numerically searchable property data)

Other Sources: DSL**, EINECS**, TSCA**

(**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

11306 REFERENCES IN FILE CA (1962 TO DATE)
 81 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 11320 REFERENCES IN FILE CAPLUS (1962 TO DATE)
 111 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> s gptms/cn

L3 0 GPTMS/CN

=> s glycidoxypropane trimethoxysilane

1 GLYCIDOXYPROPANE

4030 TRIMETHOXY SILANE

L4 0 GLYCIDOXYPROPANE TRIMETHOXY SILANE

(GLYCIDOXYPROPANE (W) TRIMETHOXY SILANE)

=> s glycidoxypropanetrimethoxysilane

L5 0 GLYCIDOXYPROPANETRIMETHOXY SILANE

=> s glycidoxypropane and trimethoxysilane

1 GLYCIDOXYPROPANE

4030 TRIMETHOXY SILANE

L6 0 GLYCIDOXYPROPANE AND TRIMETHOXY SILANE

=> s glycidoxy and trimethoxysilane

482 GLYCIDOXY

4030 TRIMETHOXY SILANE

L7 282 GLYCIDOXY AND TRIMETHOXY SILANE

=> s 17 and propyl

1729315 PROPYL

L8 280 L7 AND PROPYL

=> d 280

L8 ANSWER 280 OF 280 REGISTRY COPYRIGHT 2003 ACS

RN 2530-83-8 REGISTRY

CN Silane, trimethoxy[3-(oxiranylmethoxy)propyl]- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Silane, [3-(2,3-epoxypropoxy)propyl]trimethoxy- (8CI)

OTHER NAMES:

CN (..gamma.-Glycidoxypropyl)trimethoxysilane

CN (3-Glycidoxypropyl)trimethoxysilane

CN 1-(Glycidyloxy)-3-(trimethoxysilyl)propane

CN 2-[[3-(Trimethoxysilyl)propoxy]methyl]oxirane

CN 3-(Glycidyloxy)propyltrimethoxysilane

CN 3-(Trimethoxysilyl)propyl glycidyl ether

CN A 187

CN Dynasytan GLYMO

CN Dynasytan GLYMO G 6720

CN DZ 6040

CN G 6720

CN Glycidoxypropyltrimethoxysilane

CN Glycidyl .gamma.-(trimethoxysilyl)propyl ether

CN Glycidyl 3-(trimethoxysilyl)propyl ether

CN Glycidyloxypropyltrimethoxysilane

CN GLYMO

CN GPS-M

CN Hysol EA 9203

CN KBM 403

CN KH 560

CN LS 2940

CN MSEP 2

CN NUCA 187

CN Petlark G 6720

CN Prosil 5136

CN S 510

CN Saivinol M 806

CN SF 6040

CN SH 6040

CN Sila-Ace S 510

CN Silane A 187

CN Silane Z 6040

CN Silquest A 187

CN SK 81149

CN SZ 6040

CN TC 100

CN Toray Silicon SH 6040

CN Trimethoxy(3-glycidoxypropyl)silane

CN Trimethoxy-.gamma.-glycidoxypropylsilane

CN TSL 8350

CN Ucarsil TC 100

CN X 6146

CN Y 4087

CN Z 6040

CN [.gamma.-(Glycidyloxy)propyl]trimethoxysilane

CN [3-(2,3-Epoxypropoxy)propyl]trimethoxysilane

CN [3-(Glycidyloxy)propyl]trimethoxysilane

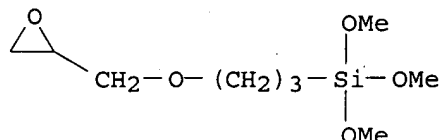
CN [[3-(Trimethoxysilyl)propoxy]methyl]oxirane

FS 3D CONCORD

DR 163035-07-2, 120026-01-9, 51938-40-0, 108727-79-3, 65323-93-5,

138590-36-0, 88385-40-4, 26348-10-7, 53029-18-8, 225795-63-1, 346694-79-9

MF C9 H20 O5 Si
 CI COM
 LC STN Files: ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, CA, CAOLD, CAPLUS,
 CASREACT, CHEMCATS, CHEMLIST, CIN, CSCHM, EMBASE, IFICDB, IFIPAT,
 IFIUDB, MEDLINE, MSDS-OHS, NIOSHTIC, PIRA, PROMT, RTECS*, SPECINFO,
 TOXCENTER, USPAT2, USPATFULL
 (*File contains numerically searchable property data)
 Other Sources: DSL**, EINECS**, TSCA**
 (**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

6294 REFERENCES IN FILE CA (1962 TO DATE)
 883 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 6305 REFERENCES IN FILE CAPLUS (1962 TO DATE)
 23 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> s mercaptopropyl and trimethoxysilane

3116 MERCAPTOPROPYL

4030 TRIMETHOXYLSILANE

L9 94 MERCAPTOPROPYL AND TRIMETHOXYLSILANE

=> d 94

L9 ANSWER 94 OF 94 REGISTRY COPYRIGHT 2003 ACS

RN 4420-74-0 REGISTRY

CN 1-Propanethiol, 3-(trimethoxysilyl)- (7CI, 8CI, 9CI) (CA INDEX NAME)

OTHER NAMES:

CN (.gamma.-Mercaptopropyl)trimethoxysilane

CN (3-Mercaptopropyl)trimethoxysilane

CN (3-Thiopropyl)trimethoxysilane

CN 3-(Sulfanylpropyl)trimethoxysilane

CN 3-(Trimethoxysilyl)-1-propanethiol

CN 3-(Trimethoxysilyl)propanethiol

CN 3-(Trimethoxysilyl)propyl mercaptan

CN 3-Mercaptopropyl trimethoxysilane

CN A 189

CN AZ 6129

CN Dynasytan MTMO

CN Dynasytan NTNS

CN GF 70

CN KBE 803

CN KBM 803

CN KBM 803P

CN M 8500

CN M 8500 (coupling agent)

CN MPS

CN MPS-M

CN NUCA 189

CN Prosil 196

CN SH 6062

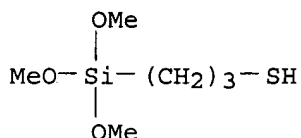
CN Sila-Ace S 810

CN Silan GF 70

CN Silane A 189

CN Silquest A 189

CN TSL 8380
 CN TSL 8380E
 CN VP-Si 163
 CN Z 6062
 FS 3D CONCORD
 DR 161756-15-6, 53241-23-9, 56938-96-6, 383189-28-4
 MF C6 H16 O3 S Si
 CI COM
 LC STN Files: BEILSTEIN*, BIOSIS, CA, CAOLD, CAPLUS, CASREACT, CEN,
 CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, GMELIN*, HODOC*, IFICDB,
 IFIPAT, IFIUDB, MEDLINE, MSDS-OHS, PIRA, RTECS*, SPECINFO, TOXCENTER,
 USPAT2, USPATFULL
 (*File contains numerically searchable property data)
 Other Sources: DSL**, EINECS**, TSCA**
 (**Enter CHEMLIST File for up-to-date regulatory information)



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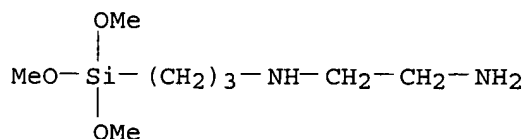
2418 REFERENCES IN FILE CA (1962 TO DATE)
 436 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 2423 REFERENCES IN FILE CAPLUS (1962 TO DATE)
 2 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> s aminopropyl and trimethoxysilane
 29790 AMINOPROPYL
 4030 TRIMETHOXYSILANE
 L10 262 AMINOPROPYL AND TRIMETHOXYSILANE

=> d 262

L10 ANSWER 262 OF 262 REGISTRY COPYRIGHT 2003 ACS
 RN 1760-24-3 REGISTRY
 CN 1,2-Ethanediamine, N-[3-(trimethoxysilyl)propyl]- (9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN Ethylenediamine, N-[3-(trimethoxysilyl)propyl]- (6CI, 7CI, 8CI)
 OTHER NAMES:
 CN (2-Aminoethyl) (3-(trimethoxysilyl)propyl)amine
 CN (Trimethoxysilylpropyl)ethylenediamine
 CN .gamma.- (2-Aminoethyl) aminopropyltrimethoxysilane
 CN .gamma.- (Ethylenediamino) propyltrimethoxysilane
 CN 3-(Trimethoxysilyl)propylethylenediamine
 CN 3-[N-(2-Aminoethyl) amino] propyltrimethoxysilane
 CN 6-Amino-4-azahexyltrimethoxysilane
 CN A 0700
 CN A 1120
 CN A 1122
 CN A 1200
 CN A 1200 (amine)
 CN AAS-M
 CN AO 700
 CN AP 132
 CN Dow Corning Z 6020
 CN Dynasylan DAMO
 CN Dynasylan DAMO-T
 CN en-APTAS

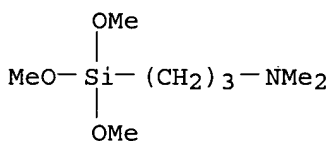
CN G 91
 CN G 91 (coupling agent)
 CN GF 91
 CN Hydrosil 2776
 CN K 1600
 CN KBM 603
 CN KH 792
 CN LS 2480
 CN LS 3750
 CN N-(.beta.-Aminoethyl)-.gamma.-aminopropyltrimethoxysilane
 CN N-(.beta.-Aminoethyl)-3-aminopropyltrimethoxysilane
 CN N-(2-Aminoethyl)-3-aminopropyltrimethoxysilane
 CN N-(Aminoethyl)aminopropyltrimethoxysilane
 CN N-(Trimethoxysilylpropyl)ethylenediamine
 CN N-Aminoethyl-3-aminopropyltrimethoxysilane
 CN N-[3-(Trimethoxysilyl)propyl]-1,2-ethanediamine
 CN N-[3-(Trimethoxysilyl)propyl]-1,2-ethylenediamine
 CN N-[3-(Trimethoxysilyl)propyl]ethylenediamine
 CN NUCA 1120
 CN Prosil 3128
 CN S 320
 CN SH 6020
 CN SIA 0591.0
 CN Sila-Ace S 320
 CN Silane A 1120
 CN Silquest A 1120
 CN SZ 6020
 CN Trimethoxy[3-[(2-aminoethyl)amino]propyl]silane
 CN TSL 8340
 CN U 15
 CN [.gamma.-(.beta.-Aminoethylamino)propyl]trimethoxysilane
 CN [3-[(2-Aminoethyl)amino]propyl]trimethoxysilane
 CN [N-(2-Aminoethyl)-.gamma.-aminopropyl]trimethoxysilane
 ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT - Use FCN, FIDE, or ALL for
 DISPLAY
 FS 3D CONCORD
 DR 165168-67-2, 127120-81-4, 53241-21-7, 37251-12-0, 77238-27-8, 143178-75-0,
 116711-38-7, 184049-27-2, 327596-19-0
 MF C8 H22 N2 O3 Si
 CI COM
 LC STN Files: BEILSTEIN*, BIOSIS, CA, CAOLD, CAPLUS, CASREACT, CBNB,
 CHEMCATS, CHEMLIST, CSChem, HODOC*, IFICDB, IFIPAT, IFIUDb, MEDLINE,
 MSDS-OHS, PROMT, RTECS*, TOXCENTER, USPAT2, USPATFULL
 (*File contains numerically searchable property data)
 Other Sources: DSL**, EINECS**, TSCA**
 (**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3584 REFERENCES IN FILE CA (1962 TO DATE)
 558 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 3589 REFERENCES IN FILE CAPLUS (1962 TO DATE)
 24 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L10 ANSWER 261 OF 262 REGISTRY COPYRIGHT 2003 ACS
 RN 2530-86-1 REGISTRY
 CN 1-Propanamine, N,N-dimethyl-3-(trimethoxysilyl)- (9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN Propylamine, N,N-dimethyl-3-(trimethoxysilyl)- (7CI, 8CI)
 OTHER NAMES:
 CN (Dimethylaminopropyl)trimethoxysilane
 CN (N,N-Dimethyl-3-aminopropyl)trimethoxysilane
 CN Dimethyl[3-(trimethoxysilyl)propyl]amine
 CN N,N-Dimethyl-3-(trimethoxysilyl)-1-propylamine
 CN N,N-Dimethyl-3-(trimethoxysilyl)propylamine
 CN N,N-Dimethylaminopropyltrimethoxysilane
 CN [3-(Dimethylamino)propyl]trimethoxysilane
 FS 3D CONCORD
 MF C8 H21 N O3 Si
 CI COM
 LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMLIST,
 CSCHEM, IFICDB, IFIPAT, IFIUDB, MSDS-OHS, SPECINFO, TOXCENTER, USPATFULL
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 Other Sources: EINECS**, NDSL**, TSCA**
 (**Enter CHEMLIST File for up-to-date regulatory information)



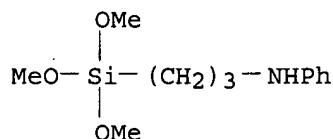
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

99 REFERENCES IN FILE CA (1962 TO DATE)
 20 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 99 REFERENCES IN FILE CAPLUS (1962 TO DATE)
 2 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> d 260

L10 ANSWER 260 OF 262 REGISTRY COPYRIGHT 2003 ACS
 RN 3068-76-6 REGISTRY
 CN Benzenamine, N-[3-(trimethoxysilyl)propyl]- (9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN Aniline, N-[3-(trimethoxysilyl)propyl]- (7CI, 8CI)
 CN Silane, (3-anilinopropyl)trimethoxy- (8CI)
 OTHER NAMES:
 CN (.gamma.-Anilinopropyl)trimethoxysilane
 CN (3-Anilinopropyl)trimethoxysilane
 CN (N-Phenyl-.gamma.-aminopropyl)trimethoxysilane
 CN .gamma.-[(Phenylamino)propyl]trimethoxysilane
 CN 3-(N-Phenylaminopropyl)trimethoxysilane
 CN 3-(Phenylaminopropyl)trimethoxysilane
 CN A 9669
 CN KBM 573
 CN N-[3-(Trimethoxysilyl)propyl]aniline
 CN P 0156
 CN Silquest Y 9669
 CN SZ 6083
 CN Trimethoxy[3-(phenylamino)propyl]silane
 CN Y 5669
 CN Y 9669
 FS 3D CONCORD

MF C12 H21 N O3 Si
 CI COM
 LC STN Files: CA, CAOLD, CAPLUS, CHEMCATS, CHEMLIST, CSCHEM, IFICDB,
 IFIPAT, IFIUDB, MSDS-OHS, SPECINFO, TOXCENTER, USPAT2, USPATFULL
 Other Sources: DSL**, EINECS**, TSCA**
 (**Enter CHEMLIST File for up-to-date regulatory information)

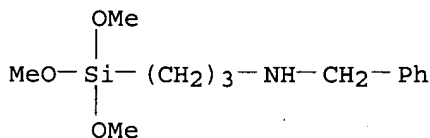


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

541 REFERENCES IN FILE CA (1962 TO DATE)
 85 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 542 REFERENCES IN FILE CAPLUS (1962 TO DATE)
 3 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> d 259

L10 ANSWER 259 OF 262 REGISTRY COPYRIGHT 2003 ACS
 RN 3068-77-7 REGISTRY
 CN Benzenemethanamine, N-[3-(trimethoxysilyl)propyl]- (9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN Benzylamine, N-[3-(trimethoxysilyl)propyl]- (7CI, 8CI)
 OTHER NAMES:
 CN .gamma.-Benzylaminopropyltrimethoxysilane
 CN N-Benzyl-.gamma.-aminopropyl trimethoxysilane
 CN X 12-512
 FS 3D CONCORD
 MF C13 H23 N O3 Si
 CI COM
 LC STN Files: CA, CAOLD, CAPLUS, CASREACT, USPATFULL



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

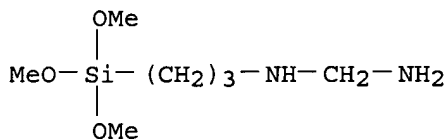
17 REFERENCES IN FILE CA (1962 TO DATE)
 2 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 17 REFERENCES IN FILE CAPLUS (1962 TO DATE)
 1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> d 258

L10 ANSWER 258 OF 262 REGISTRY COPYRIGHT 2003 ACS
 RN 3069-20-3 REGISTRY
 CN Methanediamine, N-[3-(trimethoxysilyl)propyl]- (7CI, 8CI, 9CI) (CA INDEX NAME)

OTHER NAMES:

CN N-(Aminomethyl)-.gamma.-aminopropyltrimethoxysilane
 CN N-Aminomethyl-3-aminopropyltrimethoxysilane
 FS 3D CONCORD
 MF C7 H20 N2 O3 Si
 CI COM
 LC STN Files: CA, CAOLD, CAPLUS, TOXCENTER, USPATFULL



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

11 REFERENCES IN FILE CA (1962 TO DATE)
 11 REFERENCES IN FILE CAPLUS (1962 TO DATE)
 1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

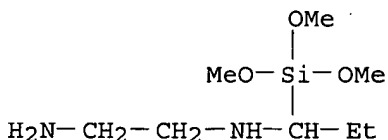
=> d 256=257

'256' IS NOT A VALID FIELD CODE

For a list of field codes in the current file, enter "HELP SFIELDS" at an arrow prompt (=>).

=> d 256-257

L10 ANSWER 256 OF 262 REGISTRY COPYRIGHT 2003 ACS
 RN 13170-53-1 REGISTRY
 CN 1,2-Ethanediamine, N-[1-(trimethoxysilyl)propyl]- (9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN Ethylenediamine, N-[1-(trimethoxysilyl)propyl]- (8CI)
 OTHER NAMES:
 CN N-(.beta.-Aminoethyl)-.alpha.-aminopropyltrimethoxysilane
 FS 3D CONCORD
 MF C8 H22 N2 O3 Si
 LC STN Files: CA, CAPLUS, IFICDB, IFIPAT, IFIUDB, TOXCENTER, USPATFULL

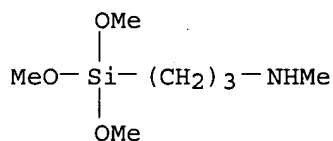


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

14 REFERENCES IN FILE CA (1962 TO DATE)
 1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 14 REFERENCES IN FILE CAPLUS (1962 TO DATE)

L10 ANSWER 257 OF 262 REGISTRY COPYRIGHT 2003 ACS
 RN 3069-25-8 REGISTRY
 CN 1-Propanamine, N-methyl-3-(trimethoxysilyl)- (9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN Propylamine, N-methyl-3-(trimethoxysilyl)- (7CI, 8CI)
 OTHER NAMES:
 CN (Methylaminopropyl) trimethoxysilane
 CN (N-Methyl-3-aminopropyl) trimethoxysilane

CN (N-Methylaminopropyl)trimethoxysilane
 CN (Trimethoxysilylpropyl)methylamine
 CN 3-(N-Methylaminopropyl)trimethoxysilane
 CN Dynasytan 1110
 CN N-Methyl-.gamma.-aminopropyltrimethoxysilane
 CN N-Methyl-3-(trimethoxysilyl)propylamine
 CN Silane 1110
 CN Trimethoxy(3-(methylamino)propyl)silane
 CN X 12-636
 CN XZ 2024
 CN [3-(Methylamino)propyl]trimethoxysilane
 FS 3D CONCORD
 DR 134910-57-9
 MF C7 H19 N O3 Si
 CI COM
 LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMLIST,
 CSChem, IFICDB, IFIPAT, IFIUDb, MSDS-OHS, TOXCENTER, USPATFULL
 (*File contains numerically searchable property data)
 Other Sources: EINECS**, NDSL**, TSCA**
 (**Enter CHEMLIST File for up-to-date regulatory information)

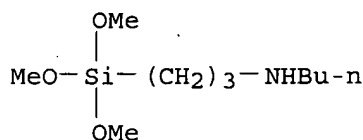


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

173 REFERENCES IN FILE CA (1962 TO DATE)
 49 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 173 REFERENCES IN FILE CAPLUS (1962 TO DATE)
 1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> d 250-255

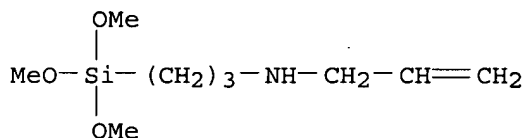
L10 ANSWER 250 OF 262 REGISTRY COPYRIGHT 2003 ACS
 RN 31024-56-3 REGISTRY
 CN 1-Butanamine, N-[3-(trimethoxysilyl)propyl]- (9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN Butylamine, N-[3-(trimethoxysilyl)propyl]- (8CI)
 OTHER NAMES:
 CN (Butylaminopropyl)trimethoxysilane
 CN Dynasytan 1189
 CN N-Butyl-3-(trimethoxysilyl)propylamine
 CN [3-(Butylamino)propyl]trimethoxysilane
 FS 3D CONCORD
 DR 372488-11-4
 MF C10 H25 N O3 Si
 CI COM
 LC STN Files: BEILSTEIN*, CA, CAPLUS, CHEMCATS, CHEMLIST, IFICDB, IFIPAT,
 IFIUDb, RTECS*, TOXCENTER, USPATFULL
 (*File contains numerically searchable property data)
 Other Sources: EINECS**, NDSL**, TSCA**
 (**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

38 REFERENCES IN FILE CA (1962 TO DATE)
8 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
38 REFERENCES IN FILE CAPLUS (1962 TO DATE)

L10 ANSWER 251 OF 262 REGISTRY COPYRIGHT 2003 ACS
RN 31024-46-1 REGISTRY
CN 2-Propen-1-amine, N-[3-(trimethoxysilyl)propyl]- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Allylamine, N-[3-(trimethoxysilyl)propyl]- (8CI)
OTHER NAMES:
CN 3-(N-Allylamino)propyltrimethoxysilane
CN N-Allyl-.gamma.-aminopropyltrimethoxysilane
CN X 12-563
FS 3D CONCORD
MF C9 H21 N O3 Si
CI COM
LC STN Files: BEILSTEIN*, CA, CAPLUS, CHEMCATS, CHEMLIST, CSCHEM, USPATFULL
(*File contains numerically searchable property data)
Other Sources: EINECS**, NDSL**, TSCA**
(*Enter CHEMLIST File for up-to-date regulatory information)

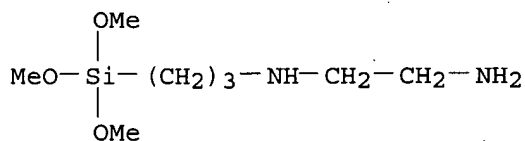


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

22 REFERENCES IN FILE CA (1962 TO DATE)
3 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
22 REFERENCES IN FILE CAPLUS (1962 TO DATE)

L10 ANSWER 252 OF 262 REGISTRY COPYRIGHT 2003 ACS
RN 29226-47-9 REGISTRY
CN 1,2-Ethanediamine, N-[3-(trimethoxysilyl)propyl]-, homopolymer (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Ethylenediamine, N-[3-(trimethoxysilyl)propyl]-, polymers (8CI)
OTHER NAMES:
CN 3-[N-(2-Aminoethyl)amino]propyltrimethoxysilane homopolymer
CN N-(2-Aminoethyl)-3-aminopropyltrimethoxysilane homopolymer
CN [3-[(2-Aminoethyl)amino]propyl]trimethoxysilane polymer
MF (C8 H22 N2 O3 Si)x
CI PMS, COM
PCT Polyother, Polyother only
LC STN Files: CA, CAPLUS, IFICDB, IFIPAT, IFIUDB, TOXCENTER, USPAT2, USPATFULL

CRN 1760-24-3
CMF C8 H22 N2 O3 Si

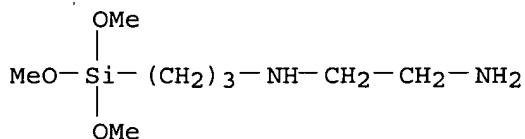


32 REFERENCES IN FILE CA (1962 TO DATE)
5 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
32 REFERENCES IN FILE CAPLUS (1962 TO DATE)

L10 ANSWER 253 OF 262 REGISTRY COPYRIGHT 2003 ACS
RN 27831-53-4 REGISTRY
CN 1,2-Ethanediamine, N-[3-(trimethoxysilyl)propyl]-, acetate (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Ethylenediamine, N-[3-(trimethoxysilyl)propyl]-, acetate (8CI)
OTHER NAMES:
CN **3-(2-Aminoethyl)aminopropyltrimethoxysilane acetate**
MF C8 H22 N2 O3 Si . x C2 H4 O2
LC STN Files: CA, CAPLUS, IFICDB, IFIPAT, IFIUDB

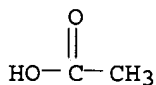
CM 1

CRN 1760-24-3
CMF C8 H22 N2 O3 Si



CM 2

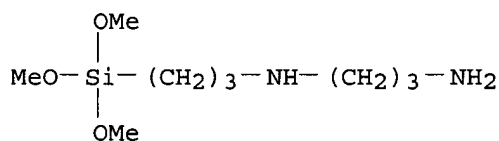
CRN 64-19-7
CMF C2 H4 O2



2 REFERENCES IN FILE CA (1962 TO DATE)
2 REFERENCES IN FILE CAPLUS (1962 TO DATE)

L10 ANSWER 254 OF 262 REGISTRY COPYRIGHT 2003 ACS
RN 25147-91-5 REGISTRY
CN 1,3-Propanediamine, N-[3-(trimethoxysilyl)propyl]- (8CI, 9CI) (CA INDEX NAME)
OTHER NAMES:
CN **3-[(3-Aminopropyl)aminopropyl trimethoxysilane**
FS 3D CONCORD
MF C9 H24 N2 O3 Si
CI COM
LC STN Files: CA, CAPLUS, IFICDB, IFIPAT, IFIUDB, RTECS*, TOXCENTER, USPAT2, USPATFULL

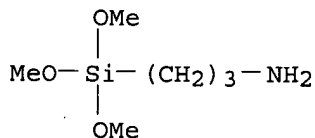
(*File contains numerically searchable property data)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

19 REFERENCES IN FILE CA (1962 TO DATE)
4 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
19 REFERENCES IN FILE CAPLUS (1962 TO DATE)

L10 ANSWER 255 OF 262 REGISTRY COPYRIGHT 2003 ACS
RN 13822-56-5 REGISTRY
CN 1-Propanamine, 3-(trimethoxysilyl)- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Propylamine, 3-(trimethoxysilyl)- (6CI, 7CI, 8CI)
OTHER NAMES:
CN (.gamma.-Aminopropyl)trimethoxysilane
CN (3-Aminopropyl)trimethoxysilane
CN 3-(Trimethoxysilyl)-1-propanamine
CN 3-(Trimethoxysilyl)propylamine
CN A 0800
CN A 1001
CN A 1108
CN A 1110
CN Aminopropyltrimethoxysilane
CN AMMO
CN Dynasytan AMMO
CN KBM 903
CN LS 1420
CN NUC Silane A 1110
CN S 360
CN SC 3900
CN Sila-Ace MS 3301
CN Sila-Ace S 360
CN Silane SC 3900
CN Silquest A 1110
CN Trimethoxy(3-aminopropyl)silane
CN TSL 8330
FS 3D CONCORD
DR 12738-51-1, 86158-92-1, 107397-00-2
MF C6 H17 N O3 Si
CI COM
LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN*, BIOSIS, CA, CAOLD, CAPLUS,
CASREACT, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHM, IFICDB, IFIPAT,
IFIUDB, MEDLINE, MSDS-OHS, PIRA, SPECINFO, TOXCENTER, USPAT2, USPATFULL
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)



****PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT****

2187 REFERENCES IN FILE CA (1962 TO DATE)
451 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
2193 REFERENCES IN FILE CAPLUS (1962 TO DATE)
3 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> s diglycidyl and hexahydrophthalate

2805 DIGLYCIDYL

161 HEXAHYDROPHthalate

L11 45 DIGLYCIDYL AND HEXAHYDROPHthalate

=> d 45

L11 ANSWER 45 OF 45 REGISTRY COPYRIGHT 2003 ACS

RN 5493-45-8 REGISTRY

CN 1,2-Cyclohexanedicarboxylic acid, bis(oxiranylmethyl) ester (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1,2-Cyclohexanedicarboxylic acid, bis(2,3-epoxypropyl) ester (7CI, 8CI)

CN 1-Propanol, 2,3-epoxy-, 1,2-cyclohexanedicarboxylate (2:1) (8CI)

OTHER NAMES:

CN Bis(2,3-epoxypropyl) 1,2-cyclohexanedicarboxylate

CN Diglycidyl 1,2-cyclohexanedicarboxylate

CN Diglycidyl hexahydrophthalate

CN Hexahydrophthalic acid diglycidyl ester

FS 3D CONCORD

MF C14 H20 O6

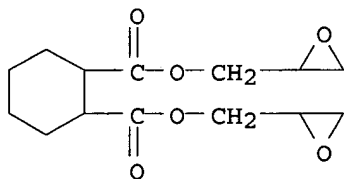
CI COM

LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS, CHEMCATS, CHEMLIST, CSCHEM, CSNB, IFICDB, IFIPAT, IFIUDB, MEDLINE, MSDS-OHS, PROMT, RTECS*, TOXCENTER, USPATFULL

(*File contains numerically searchable property data)

Other Sources: DSL**, EINECS**, TSCA**

(**Enter CHEMLIST File for up-to-date regulatory information)



****PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT****

190 REFERENCES IN FILE CA (1962 TO DATE)
39 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
190 REFERENCES IN FILE CAPLUS (1962 TO DATE)
2 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> s dop

L12 1458 DOP

=> s dop/cn

L13 1 DOP/CN

=> d

L13 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS

RN 117-81-7 REGISTRY
CN 1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Phthalic acid, bis(2-ethylhexyl) ester (6CI, 8CI)

OTHER NAMES:

CN 2-Ethylhexyl phthalate
CN 3315AF2
CN Bis(2-ethylhexyl) 1,2-benzenedicarboxylate
CN Bis(2-ethylhexyl) o-phthalate
CN Bis(2-ethylhexyl) phthalate
CN Bisoflex 81
CN Bisoflex DOP
CN Compound 889
CN Corflex 400
CN DEHP
CN Di(2-ethylhexyl) phthalate
CN Di(isooctyl) phthalate
CN Diacizer DOP
CN Dioctyl phthalate
CN DOF
CN DOF (Russian plasticizer)
CN **DOP**
CN Ergoplast FDO
CN Ergoplast FDO-S
CN Etalon
CN Etalon (plasticizer)
CN Ethylhexyl phthalate
CN Eviplast 80
CN Eviplast 81
CN Fleximel
CN Flexol DOD
CN Flexol DOP
CN Garbeflex DOP-D 40
CN Good-rite GP 264
CN Hatco DOP
CN Jayflex DOP
CN Kodaflex DEHP
CN Kodaflex DOP
CN Monocizer DOP
CN Octoil
CN Octyl phthalate
CN Palatinol AH
CN Palatinol AH-L
CN Phthalic acid di(2-ethylhexyl) ester
CN Phthalic acid dioctyl ester
CN Pittsburgh PX 138
CN Plasthall DOP
CN Reomol D 79P
CN Sansocizer DOP
CN Sansocizer R 8000
CN Sconamoll DOP
CN Sicol 150
CN Staflex DOP
CN Truflex DOP

ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT - Use FCN, FIDE, or ALL for DISPLAY

FS 3D CONCORD

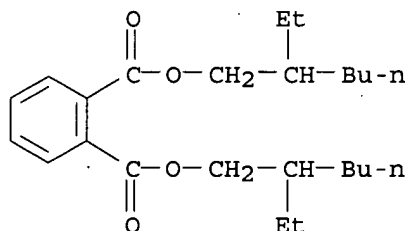
DR 8033-53-2, 126639-29-0, 50885-87-5, 109630-52-6, 137718-37-7, 40120-69-2, 205180-59-2, 275818-89-8

MF C24 H38 O4

CI COM

LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMLIST, CHEMSAFE, CIN, CSCHEM, CSNB, DDFU, DETHERM*, DIPPR*,

DRUGU, EMBASE, HODOC*, HSDB*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE,
 MRCK*, MSDS-OHS, NAPRALERT, NIOSHTIC, PDLCOM*, PIRA, PROMT, RTECS*,
 SPECINFO, TOXCENTER, ULIDAT, USPAT2, USPATFULL, VTB
 (*File contains numerically searchable property data)
 Other Sources: DSL**, EINECS**, TSCA**
 (**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

11306 REFERENCES IN FILE CA (1962 TO DATE)
 81 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 11320 REFERENCES IN FILE CAPLUS (1962 TO DATE)
 111 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> d his

(FILE 'HOME' ENTERED AT 19:09:55 ON 09 MAR 2003)

FILE 'REGISTRY' ENTERED AT 19:10:01 ON 09 MAR 2003

L1	1 S SU 8/CN
L2	1 S DOP/CN
L3	0 S GPTMS/CN
L4	0 S GLYCIDOXYPROPANE TRIMETHOXY-SILANE
L5	0 S GLYCIDOXYPROPANETRIMETHOXY-SILANE
L6	0 S GLYCIDOXYPROPANE AND TRIMETHOXY-SILANE
L7	282 S GLYCIDOXYPROPANE AND TRIMETHOXY-SILANE
L8	280 S L7 AND PROPYL
L9	94 S MERCAPTOPROPYL AND TRIMETHOXY-SILANE
L10	262 S AMINOPROPYL AND TRIMETHOXY-SILANE
L11	45 S DIGLYCIDYL AND HEXAHYDRO-PHTHALATE
L12	1458 S DOP
L13	1 S DOP/CN

=> file ca

COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
117.70	117.91

FULL ESTIMATED COST

FILE 'CA' ENTERED AT 19:18:34 ON 09 MAR 2003

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

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FILE COVERS 1907 - 6 Mar 2003 VOL 138 ISS 11
FILE LAST UPDATED: 6 Mar 2003 (20030306/ED)

This file contains CAS Registry Numbers for easy and accurate
substance identification.

```
=> s l1 and l13
      150 L1
      11302 L13
L14      0 L1 AND L13
```

```
=> s epoxy resin and l13
      193707 EPOXY
      490130 RESIN
      90850 EPOXY RESIN
          (EPOXY(W) RESIN)
      11302 L13
L15      204 EPOXY RESIN AND L13
```

```
=> file reg
COST IN U.S. DOLLARS                SINCE FILE      TOTAL
                                     ENTRY      SESSION
FULL ESTIMATED COST                3.68      121.59
```

FILE 'REGISTRY' ENTERED AT 19:18:58 ON 09 MAR 2003
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
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Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES: 7 MAR 2003 HIGHEST RN 497212-14-3
DICTIONARY FILE UPDATES: 7 MAR 2003 HIGHEST RN 497212-14-3

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP
PROPERTIES for more information. See STNnote 27, Searching Properties
in the CAS Registry File, for complete details:
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

```
=> s 2530-83-8 or 4420-74-0 or 13822-36-5
      1 2530-83-8
          (2530-83-8/RN)
      1 4420-74-0
          (4420-74-0/RN)
      0 13822-36-5
          (13822-36-5/RN)
L16      2 2530-83-8 OR 4420-74-0 OR 13822-36-5
```

```
=> s 2530-83-8 or 4420-74-0 or 13822-56-5
      1 2530-83-8
          (2530-83-8/RN)
      1 4420-74-0
          (4420-74-0/RN)
      1 13822-56-5
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(13822-56-5/RN)
L17 3 2530-83-8 OR 4420-74-0 OR 13822-56-5

=> file ca

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.80

122.39

FILE 'CA' ENTERED AT 19:19:59 ON 09 MAR 2003

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FILE COVERS 1907 - 6 Mar 2003 VOL 138 ISS 11

FILE LAST UPDATED: 6 Mar 2003 (20030306/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d his

(FILE 'HOME' ENTERED AT 19:09:55 ON 09 MAR 2003)

FILE 'REGISTRY' ENTERED AT 19:10:01 ON 09 MAR 2003

L1 1 S SU 8/CN
L2 1 S DOP/CN
L3 0 S GPTMS/CN
L4 0 S GLYCIDOXYPROPANE TRIMETHOXY SILANE
L5 0 S GLYCIDOXYPROPANETRIMETHOXY SILANE
L6 0 S GLYCIDOXYPROPANE AND TRIMETHOXY SILANE
L7 282 S GLYCIDOXYPROPANE AND TRIMETHOXY SILANE
L8 280 S L7 AND PROPYL
L9 94 S MERCAPTOPROPYL AND TRIMETHOXY SILANE
L10 262 S AMINOPROPYL AND TRIMETHOXY SILANE
L11 45 S DIGLYCIDYL AND HEXAHYDROPHTHALATE
L12 1458 S DOP
L13 1 S DOP/CN

FILE 'CA' ENTERED AT 19:18:34 ON 09 MAR 2003

L14 0 S L1 AND L13
L15 204 S EPOXY RESIN AND L13

FILE 'REGISTRY' ENTERED AT 19:18:58 ON 09 MAR 2003

L16 2 S 2530-83-8 OR 4420-74-0 OR 13822-36-5
L17 3 S 2530-83-8 OR 4420-74-0 OR 13822-56-5

FILE 'CA' ENTERED AT 19:19:59 ON 09 MAR 2003

=> s l17 and l13

9642 L17

11302 L13

L18 42 L17 AND L13

=> s 118 and epoxy
193707 EPOXY
L19 6 L18 AND EPOXY

=> d all 1-6

L19 ANSWER 1 OF 6 CA COPYRIGHT 2003 ACS
AN 138:123822 CA
TI Photocatalyst-coated knitted textile as antisoiling mesh sheet for construction
IN Suzuki, Hiroshi
PA Hiraoka and Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 20 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM D06M011-46
ICS B01J021-08; B01J035-02; B01J035-06; D06M011-79; D03D001-00; D03D015-00

CC 40-10 (Textiles and Fibers)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2003027366	A2	20030129	JP 2001-220250	20010719
PRAI	JP 2001-220250		20010719		
AB	Title knitted textile coated with inorg. photocatalysts is characterized by thread gap 0.5-10 mm, thread diam. 0.5-3 mm, and porosity 0.1-0.5. Thus, a textile sheet was knitted from light stabilizer and carbon black-contg. bicomponent propylene filaments (core: polypropylene; sheath: ethylene-propylene copolymer), immersed in a compn. comprising acrylic silicone, Me silicate MS 51, and .gamma.-glycidoxypropyltrimethoxysilane, and coated with a compn. contg. titania and silica to give an antisoiling mesh sheet.				
ST	titania photocatalyst coated bicomponent polypropylene fiber antisoiling mesh sheet				
IT	Polysiloxanes, uses				
	RL: TEM (Technical or engineered material use); USES (Uses) (acrylic, protective coating contg.; photocatalyst-coated knitted textile as antisoiling mesh sheet for construction)				
IT	Coating materials				
	(antisoiling; photocatalyst-coated knitted textile as antisoiling mesh sheet for construction)				
IT	Polypropene fibers, uses				
	RL: CPS (Chemical process); PEP (Physical, engineering or chemical process); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PROC (Process); USES (Uses) (bicomponent with ethylene-propylene fiber, core-sheath; photocatalyst-coated knitted textile as antisoiling mesh sheet for construction)				
IT	Polysiloxanes, uses				
	RL: TEM (Technical or engineered material use); USES (Uses) (epoxy, protective coating; photocatalyst-coated knitted textile as antisoiling mesh sheet for construction)				
IT	Polyolefin fibers				
	RL: CPS (Chemical process); PEP (Physical, engineering or chemical process); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PROC (Process); USES (Uses) (ethylene, bicomponent with polypropylene fiber, core-sheath; photocatalyst-coated knitted textile as antisoiling mesh sheet for construction)				
IT	Textiles				
	(knitted; photocatalyst-coated knitted textile as antisoiling mesh sheet for construction)				
IT	Silica gel, uses				
	RL: TEM (Technical or engineered material use); USES (Uses)				

(photocatalyst coating contg.; photocatalyst-coated knitted textile as antisoiling mesh sheet for construction)

IT Photolysis catalysts
(photocatalyst-coated knitted textile as antisoiling mesh sheet for construction)

IT Acrylic polymers, uses
Fluoropolymers, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(plasticizer-blocking coating; photocatalyst-coated knitted textile as antisoiling mesh sheet for construction)

IT Polyesters, uses
RL: MOA (Modifier or additive use); USES (Uses)
(plasticizer; photocatalyst-coated knitted textile as antisoiling mesh sheet for construction)

IT Acrylic polymers, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(polysiloxane-, protective coating contg.; photocatalyst-coated knitted textile as antisoiling mesh sheet for construction)

IT Epoxy resins, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(polysiloxane-, protective coating; photocatalyst-coated knitted textile as antisoiling mesh sheet for construction)

IT 9010-79-1, Ethylene-propylene copolymer
RL: CPS (Chemical process); PEP (Physical, engineering or chemical process); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PROC (Process); USES (Uses)
(bicomponent with polypropylene fiber, core-sheath; photocatalyst-coated knitted textile as antisoiling mesh sheet for construction)

IT 7631-86-9, Colloidal silica, uses
RL: MOA (Modifier or additive use); USES (Uses)
(colloidal, photocatalyst coating contg.; photocatalyst-coated knitted textile as antisoiling mesh sheet for construction)

IT 25085-53-4, Isotactic polypropylene
RL: CPS (Chemical process); PEP (Physical, engineering or chemical process); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PROC (Process); USES (Uses)
(fiber, bicomponent with ethylene-propylene fiber, core-sheath; photocatalyst-coated knitted textile as antisoiling mesh sheet for construction)

IT 37640-57-6, Melamine isocyanurate 139638-82-7, Sumikaflex 752
RL: TEM (Technical or engineered material use); USES (Uses)
(fire-resistant coating contg.; photocatalyst-coated knitted textile as antisoiling mesh sheet for construction)

IT 13463-67-7, Titania, uses
RL: CAT (Catalyst use); USES (Uses)
(photocatalyst coating contg.; photocatalyst-coated knitted textile as antisoiling mesh sheet for construction)

IT 409-21-2, Silicon carbide, uses 1303-00-0, Gallium arsenide, uses
1304-76-3, Bismuth oxide, uses 1306-23-6, Cadmium sulfide (CdS), uses
1306-38-3, Cerium dioxide, uses 1309-37-1, Iron trioxide, uses
1313-99-1, Nickel oxide, uses 1314-13-2, Zinc oxide, uses 1314-35-8, Tungsten oxide, uses 1314-61-0, Tantalum oxide 1317-33-5, Molybdenum sulfide, uses 1317-39-1, Copper oxide, uses 12036-10-1, Ruthenium dioxide 12047-27-7, Barium titanate (BaTiO₃), uses 12060-59-2, Strontium titanate (SrTiO₃) 12063-98-8, Gallium phosphide (GaP), uses 12532-47-7, Indium, compd. with lead (1:1) 18282-10-5, Tin oxide (SnO₂) 22398-80-7, Indium phosphide, uses 34196-36-6D, Titanium oxide (TiO₃), hydrate 212324-50-0, Niobium potassium oxide (NBK2O₃)
RL: CAT (Catalyst use); USES (Uses)
(photocatalyst-coated knitted textile as antisoiling mesh sheet for construction)

IT 9011-14-7, Acryplen HBS 001 25684-76-8, Kynar 7201
RL: TEM (Technical or engineered material use); USES (Uses)
(plasticizer-blocking coating; photocatalyst-coated knitted textile as

antisoiling mesh sheet for construction)
 IT 9002-86-2, Polyvinyl chloride
 RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
 (plasticizer-contg. coating; photocatalyst-coated knitted textile as antisoiling mesh sheet for construction)
 IT 117-81-7, DOP 3319-31-1, Trimex T 08 26337-35-9, Elvaloy 741 39363-83-2, HA 5 (polyester)
 RL: MOA (Modifier or additive use); USES (Uses)
 (plasticizer; photocatalyst-coated knitted textile as antisoiling mesh sheet for construction)
 IT 2530-83-8, .gamma.-Glycidoxypyltrimethoxysilane
 RL: MOA (Modifier or additive use); USES (Uses)
 (protective coating contg.; photocatalyst-coated knitted textile as antisoiling mesh sheet for construction)
 IT 12002-26-5, MS 51
 RL: TEM (Technical or engineered material use); USES (Uses)
 (protective coating contg.; photocatalyst-coated knitted textile as antisoiling mesh sheet for construction)

L19 ANSWER 2 OF 6 CA COPYRIGHT 2003 ACS
 AN 133:268372 CA
 TI Modified silicone-based sealing composition for siding board wall material construction
 IN Sonoda, Yusuke
 PA Hitachi Kasei Polymer Co., Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 8 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 IC ICM E04F013-08
 ICS C08K005-3492; C08L063-00; C08L083-06; C09K003-10; C09K015-08
 CC 42-11 (Coatings, Inks, and Related Products)
 Section cross-reference(s): 39

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2000274041	A2	20001003	JP 1999-118421	19990324
PRAI	JP 1999-118421		19990324		
AB	Title compn. having good processability and appearance durability comprises (A) rubber contg. Si-bonded hydroxy and/or hydrolyzable groups and .gtoreq.1 Si-contg. group being crosslinkable by forming siloxane bond (Excestar) 100, (B) epoxy resin (EP 4100) 5-20, (C) air-curable substance (tung oil) 3-7, (D) photocurable resin (Aronix M 8060) 4-8, (E) benzotriazole UV absorbent (Tinuvin 327) 0.4-0.8, (F) hindered phenol oxidant (Irganox 1010) 1.0-1.5, (G) phthalic acid ester plasticizer (dioctyl phthalate) 75-90, (H) filler (CCR and NS 2100) 240-270, (I) sag-resistant reinforcer (Disparlon 305) 10-15, (J) quaternary tin compd. (ESC 701) 1-2, (K) epoxy silane (A 187) 7-10 parts.				
ST	silicone rubber sealing compn siding board wall construction; epoxy resin sealing compn siding board wall construction; crosslinking agent sealing compn siding board wall construction; oxidant sealing compn siding board wall construction; filler sealing compn siding board wall construction; plasticizer sealing compn siding board wall construction				
IT	Absorbents (UV, compn. contg.; prepn. of modified silicone-based sealing compn. for siding board wall material construction)				
IT	Polyesters, uses RL: MOA (Modifier or additive use); PRP (Properties); TEM (Technical or engineered material use); USES (Uses) (acrylates, oligomeric, compn. contg.; prepn. of modified silicone-based sealing compn. for siding board wall material construction)				
IT	Crosslinking agents				

Crosslinking catalysts

Fillers

Oxidizing agents

Plasticizers

(compn. contg.; prepn. of modified silicone-based sealing compn. for siding board wall material construction)

IT Tung oil

RL: MOA (Modifier or additive use); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)

(compn. contg.; prepn. of modified silicone-based sealing compn. for siding board wall material construction)

IT Polyethers, uses

Polyethers, uses

RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)

(epoxy, compn. contg.; prepn. of modified silicone-based sealing compn. for siding board wall material construction)

IT Castor oil

RL: MOA (Modifier or additive use); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)

(hydrogenated, Disparlon 305, compn. contg.; prepn. of modified silicone-based sealing compn. for siding board wall material construction)

IT Epoxy resins, uses

Epoxy resins, uses

RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)

(polyether-, compn. contg.; prepn. of modified silicone-based sealing compn. for siding board wall material construction)

IT Sealing compositions

(prepn. of modified silicone-based sealing compn. for siding board wall material construction)

IT Silicone rubber, uses

RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)

(prepn. of modified silicone-based sealing compn. for siding board wall material construction)

IT Construction materials

(siding; prepn. of modified silicone-based sealing compn. for siding board wall material construction)

IT Construction materials

(wallboards; prepn. of modified silicone-based sealing compn. for siding board wall material construction)

IT 7440-31-5D, Tin, derivs., uses 298706-20-4, ESC 701

RL: CAT (Catalyst use); USES (Uses)

(compn. contg.; prepn. of modified silicone-based sealing compn. for siding board wall material construction)

IT 117-81-7, DOP 471-34-1, CCR, uses 2530-83-8, A 187

3864-99-1, Tinuvin 327 6683-19-8, Irganox 1010 70225-44-4, Aronix 8060 298706-13-5, NS 2100

RL: MOA (Modifier or additive use); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)

(compn. contg.; prepn. of modified silicone-based sealing compn. for siding board wall material construction)

IT 25085-99-8, EP 4100

RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)

(compn. contg.; prepn. of modified silicone-based sealing compn. for siding board wall material construction)

L19 ANSWER 3 OF 6 CA COPYRIGHT 2003 ACS

AN 132:294845 CA

TI Adhesive compositions with long pot life for roll coating

IN Kawabata, Kazuhiro

PA Sekisui Chemical Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 4 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 IC ICM C09J171-00
 ICS B05C001-02; B05C001-08; B05D007-24
 CC 38-3 (Plastics Fabrication and Uses)
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2000119625	A2	20000425	JP 1998-290919	19981013
PRAI	JP 1998-290919		19981013		
AB	The title compns. comprise (a) hydrolyzable silyl-terminated polyethers (e.g., MS Polymer S 303) and (b) compds. contg. ureide groups and crosslinkable hydrolyzable silyl groups (e.g., A-1160), (c) compds. contg. epoxy groups and crosslinkable hydrolyzable silyl groups (e.g., Sila Ace S-510, Sila Ace S-530), or (d) compd. contg. mercapto groups and crosslinkable hydrolyzable silyl groups (e.g., AZ-6129).				
ST	ureide silane polyether adhesive roll coating; glycidoxo silane polyether adhesive roll coating; mercapto silane polyether adhesive roll coating				
IT	Adhesives (adhesive compns. with long pot life for roll coating)				
IT	Polyethers, uses RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses) (adhesive compns. with long pot life for roll coating)				
IT	Silanes RL: MOA (Modifier or additive use); PRP (Properties); TEM (Technical or engineered material use); USES (Uses) (alkoxy; adhesive compns. with long pot life for roll coating)				
IT	Coating process (roller; adhesive compns. with long pot life for roll coating)				
IT	23779-32-0, A-1160 RL: MOA (Modifier or additive use); PRP (Properties); TEM (Technical or engineered material use); USES (Uses) (A-1160; adhesive compns. with long pot life for roll coating)				
IT	4420-74-0, AZ-6129 RL: MOA (Modifier or additive use); PRP (Properties); TEM (Technical or engineered material use); USES (Uses) (AZ-6129; adhesive compns. with long pot life for roll coating)				
IT	77396-40-8, MS Polymer S 303 RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses) (MS Polymer S 303; adhesive compns. with long pot life for roll coating)				
IT	2530-83-8, Sila Ace S-510 RL: MOA (Modifier or additive use); PRP (Properties); TEM (Technical or engineered material use); USES (Uses) (Sila Ace S-510; adhesive compns. with long pot life for roll coating)				
IT	3388-04-3, Sila Ace S-530 RL: MOA (Modifier or additive use); PRP (Properties); TEM (Technical or engineered material use); USES (Uses) (Sila Ace S-530; adhesive compns. with long pot life for roll coating)				
IT	2768-02-7, TSL-8310 RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses) (TSL-8310; adhesive compns. with long pot life for roll coating)				
IT	471-34-1, Whiton P-30, uses RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses) (Whiton P-30; adhesive compns. with long pot life for roll coating)				
IT	117-81-7, DOP RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses) (adhesive compns. with long pot life for roll coating)				

IT 77-58-7, U-100
RL: CAT (Catalyst use); USES (Uses)
(catalysts; adhesive compns. with long pot life for roll coating)

L19 ANSWER 4 OF 6 CA COPYRIGHT 2003 ACS
AN 120:109117 CA
TI **Epoxy** resin compositions for metal adhesives
IN Zhang, Guofu
PA Peop. Rep. China
SO Faming Zhuanli Shenqing Gongkai Shuomingshu, 5 pp.
CODEN: CNXXEV
DT Patent
LA Chinese
IC ICM C09J163-00
CC 38-3 (Plastics Fabrication and Uses)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	CN 1070211	A	19930324	CN 1992-110102	19920820
	CN 1033862	B	19970122		
PRAI	CN 1992-110102		19920820		
AB	The title compns., with good adhesion and rapid curing properties, comprise E 44, E 51, polysulfide rubber, KH 560, tri-Bu phosphate, DOP, ethylenediamine-formaldehyde-phenol copolymer, T 31, o-sulfobenzimide, DMP 30, Mg oxide, and powd. Fe.				
ST	metal adhesive epoxy compn; polysulfide rubber epoxy adhesive metal; ethylenediamine formaldehyde phenol epoxy adhesive				
IT	Metals, uses RL: USES (Uses) (adhesives for, epoxy resin and polysulfide blend compns. as, with good adhesion)				
IT	Adhesives (epoxy resin and polysulfide blend compns., for metals)				
IT	Rubber, polysulfide RL: USES (Uses) (epoxy resin metal adhesive compns. contg., with good adhesion and rapid curing)				
IT	Epoxy resins, miscellaneous RL: MSC (Miscellaneous) (metal adhesive compns. contg., with good adhesion and rapid curing)				
IT	2530-83-8, KH 560 RL: USES (Uses) (coupling agents, epoxy metal adhesive compns. contg., with good adhesion and rapid curing)				
IT	11103-83-6, T 31 28985-91-3, Ethylenediamine-formaldehyde-phenol copolymer RL: USES (Uses) (curing agents, epoxy resin metal adhesive compns. contg., with good adhesion and rapid curing)				
IT	81-07-2 90-72-2 117-81-7, DOP 126-73-8, Tributyl phosphate, miscellaneous RL: USES (Uses) (epoxy resin metal adhesive compns. contg., with good adhesion and rapid curing)				
IT	25068-38-6, E 44 RL: USES (Uses) (metal adhesive compns. contg., with good adhesion and rapid curing)				
IT	1309-48-4, Magnesium oxide, miscellaneous 1675-54-3 7439-89-6, Iron, miscellaneous RL: MSC (Miscellaneous) (metal adhesive compns. contg., with good adhesion and rapid curing)				

L19 ANSWER 5 OF 6 CA COPYRIGHT 2003 ACS
AN 117:132532 CA

TI Vinyl chloride plastisol compositions
 IN Seno, Masao; Shimada, Makoto
 PA Kobayashi K. K., Japan
 SO Jpn. Kokai Tokkyo Koho, 6 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 IC ICM C08L027-06
 ICS C08K005-54; C08L091-00; C09J127-06
 CC 38-3 (Plastics Fabrication and Uses)
 Section cross-reference(s): 40

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 04039345	A2	19920210	JP 1990-146092	19900606
PRAI	JP 1990-146092		19900606		
AB	Title compns., useful as adhesives for polyester and vinal fibers, comprise vinyl chloride polymers, plasticizers, fillers, silane compds. as adhesion improvers composed of 0.5-3.0 parts 3-(2-aminoethylamino)propyltrimethoxysilane and 0.5-5.0 parts .gamma.-glycidoxypropyltrimethoxysilane, epoxy -type stabilizers selected from epoxidized soybean oil, epoxidized tall oil, and cyclohexene oxide derivs., and 1.5-4.0 parts liq. (at room temp.) nonionic surfactants. Thus, PVC (G 28) 100, DOP 60, Softon 1200 25, O-130P (epoxidized soybean oil) 4, KBM 603 2.5, KBM 403 2.5, and Nonion P 3 [polyoxyethylene deriv. surfactant] 2.0 parts were blended to give a plastisol having T peel strength 7.8 to polyester cloth, 10.0 to vinal cloth, and 3.5 kg/in. to nylon cloth and sol viscosity 3580 initially, 4900 after 7 days, 5440 after 14 days, and 5600 cP after 28 days.				
ST	vinyl chloride polymer plastisol adhesive; silane adhesion improver plastisol; epoxy stabilizer vinyl chloride polymer; nonionic surfactant vinyl chloride polymer; polyester fiber adhesive plastisol compn; vinylon fiber adhesive plastisol compn				
IT	Vinal fibers				
	RL: USES (Uses)				
	(adhesives for, vinyl chloride polymer-based plastisol as)				
IT	Polyester fibers, miscellaneous				
	RL: MSC (Miscellaneous)				
	(adhesives for, vinyl chloride polymer-based plastisol as)				
IT	Plasticizers				
	(vinyl chloride polymer-based plastisol contg., for adhesives for polyester fibers and vinal fibers)				
IT	Adhesives				
	(vinyl chloride polymer-based plastisols, for polyester fibers and vinal fibers)				
IT	Soybean oil				
	Tall oil				
	RL: USES (Uses)				
	(epoxidized, stabilizers, vinyl chloride polymer-based plastisol contg., for adhesives for polyester fibers and vinal fibers)				
IT	Surfactants				
	(nonionic, vinyl chloride polymer-based plastisol contg., for adhesives for polyester fibers and vinal fibers)				
IT	117-81-7, DOP 471-34-1, Softon 1200, uses				
	RL: MOA (Modifier or additive use); USES (Uses)				
	(plasticizers, vinyl chloride polymer-based plastisol contg., for adhesives for polyester fibers and vinal fibers)				
IT	9002-86-2, Vinyl chloride homopolymer				
	RL: USES (Uses)				
	(plastisol contg., for adhesives for polyester fibers and vinal fibers)				
IT	9003-22-9, Vinyl acetate-vinyl chloride copolymer				
	RL: USES (Uses)				
	(plastisol contg., for adhesives for polyester fibers and vinal fibers, R 850)				
IT	109191-23-3, E 85				

RL: USES (Uses)
 (stabilizers, vinyl chloride polymer-based plastisol contg., for
 adhesives for polyester fibers and vinal fibers)

IT 9002-89-5
 RL: USES (Uses)
 (vinal fibers, adhesives for, vinyl chloride polymer-based plastisol
 as)

IT 1760-24-3, KBM 603 2530-83-8, KBM 403 143476-99-7, Nissan
 Nonion P 3
 RL: USES (Uses)
 (vinyl chloride polymer-based plastisol contg., for adhesives for
 polyester fibers and vinal fibers)

IT 9005-66-7, Polyoxyethylene sorbitan monopalmitate
 RL: USES (Uses)
 (vinyl chloride polymer-based plastisol contg., for adhesives for
 polyester fibers and vinal fibers, Emulgen TWP 120)

L19 ANSWER 6 OF 6 CA COPYRIGHT 2003 ACS
 AN 90:7751 CA
 TI Coating materials for poly(methyl methacrylate)
 IN Morozumi, Kenichi; Ueno, Takashi; Saito, Takeshi
 PA Toray Industries, Inc., Japan
 SO Jpn. Kokai Tokkyo Koho, 5 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 IC C09D003-82
 CC 42-10 (Coatings, Inks, and Related Products)
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 53092844	A2	19780815	JP 1977-6827	19770126
	JP 60045232	B4	19851008		
PRAI	JP 1977-6827		19770126		

AB Compns. of hydrolyzed methyltrialkoxysilane or tetraalkoxysilane 27-80,
 alkoxysilanes having unsatd. or epoxy groups 10-72.5, and
 epoxy compds., polyalkylene glycols, oils, or dicarboxylate esters
 0.3-10 parts are applied to plastic products to improve the dyeability and
 resistance to scratching, weathering, and chems. Thus, a mixt. of
 methyltrimethoxysilane 1022, 3-methacryloyloxypropyltrimethoxysilane 373,
 AcOH 10.5, and H2O 406 parts was stirred, mixed with NaOAc 7.1, Ni(OAc)2
 7.1, and BuOH 500 g, and thickened to 7-7.5 cP with poly(vinyl butyral).
 A compn. of 100 parts (solids) of the above soln. and 2 parts of
 epoxidized Bu oleate (I) was applied to a poly(Me methacrylate) (II)
 [9011-14-7] plate and heated 2 h at 85.degree.. When the II plate was
 dyed 20 min in a disperse dye soln. at 80.degree., the plate had good
 scratch resistance (steel wool) and light transmission 49.1%. When
 epoxidized I was omitted, the light transmission of a similar II plate was
 90.2%.

ST alkoxysilane hydrolyzed copolymer coating; methacryloyloxypropylsilane
 hydrolyzed copolymer; epoxidized butyl oleate copolymer; dyeability
 hydrolyzed silane coating

IT Castor oil
 Linseed oil
 RL: USES (Uses)
 (hydrolyzed silane-based coatings modified by, for poly(Me
 methacrylate) with increased dyeability and hardness)

IT Coating materials
 (hydrolyzed silane-based, for poly(Me methacrylate) with increased
 dyeability and hardness)

IT Oils
 RL: USES (Uses)
 (sesame, hydrolyzed silane-based coatings modified by, for poly(Me
 methacrylate) with increased dyeability and hardness)

IT 9011-14-7

RL: USES (Uses)

(coatings for, hydrolyzed silanes contg. epoxidized Bu oleate as, for increased dyeability and hardness)

IT 78-08-0D, hydrolyzed, polymers 78-10-4D, hydrolyzed, polymers
1185-55-3D, hydrolyzed, polymers 2031-67-6D, hydrolyzed, polymers
2530-83-8D, hydrolyzed, polymers 2530-85-0D, hydrolyzed,
polymers

RL: TEM (Technical or engineered material use); USES (Uses)

(coatings, contg. epoxidized Bu oleate, for poly(Me methacrylate) with increased dyeability and hardness)

IT 103-23-1 117-81-7 122-62-3 142-77-8D, epoxidized 2224-15-9
25322-68-3 25322-69-4 27043-36-3

RL: USES (Uses)

(hydrolyzed silane-based coatings modified by, for poly(Me methacrylate) with increased dyeability and hardness)

=> d his

(FILE 'HOME' ENTERED AT 19:09:55 ON 09 MAR 2003)

FILE 'REGISTRY' ENTERED AT 19:10:01 ON 09 MAR 2003

L1 1 S SU 8/CN
L2 1 S DOP/CN
L3 0 S GPTMS/CN
L4 0 S GLYCIDOXYPROPANE TRIMETHOXY-SILANE
L5 0 S GLYCIDOXYPROPANETRIMETHOXY-SILANE
L6 0 S GLYCIDOXYPROPANE AND TRIMETHOXY-SILANE
L7 282 S GLYCIDOXYPROPANE AND TRIMETHOXY-SILANE
L8 280 S L7 AND PROPYL
L9 94 S MERCAPTOPROPYL AND TRIMETHOXY-SILANE
L10 262 S AMINOPROPYL AND TRIMETHOXY-SILANE
L11 45 S DIGLYCIDYL AND HEXAHYDROPHTHALATE
L12 1458 S DOP
L13 1 S DOP/CN

FILE 'CA' ENTERED AT 19:18:34 ON 09 MAR 2003

L14 0 S L1 AND L13
L15 204 S EPOXY RESIN AND L13

FILE 'REGISTRY' ENTERED AT 19:18:58 ON 09 MAR 2003

L16 2 S 2530-83-8 OR 4420-74-0 OR 13822-36-5
L17 3 S 2530-83-8 OR 4420-74-0 OR 13822-56-5

FILE 'CA' ENTERED AT 19:19:59 ON 09 MAR 2003

L18 42 S L17 AND L13
L19 6 S L18 AND EPOXY

=> s l17 and photoresist?

9642 L17
35229 PHOTORESIST?

L20 82 L17 AND PHOTORESIST?

=> s l20 and adhesion promot?

205538 ADHESION
340590 PROMOT?
4559 ADHESION PROMOT?
(ADHESION(W) PROMOT?)

L21 6 L20 AND ADHESION PROMOT?

=> d all 1-6

L21 ANSWER 1 OF 6 CA COPYRIGHT 2003 ACS

AN 137:70466 CA

TI MEMS materials and fabrication technology on large areas: the example of

an X-ray imager

AU Daniel, J. H.; Krusor, B.; Lau, R.; Lu, J. P.; Wang, Y.; Mulato, M.; Apte, R. B.; Street, R. A.; Goredema, A.; Boils-Boissier, D. C.; Silver, S. E.; Kazmaier, P. M.

CS Xerox Palo Alto Research Center, Palo Alto, CA, 94304, USA

SO Materials Research Society Symposium Proceedings (2001), 657 (Materials Science of Microelectromechanical Systems (MEMS) Devices III), EE9.3/1-EE9.3/6

CODEN: MRSPDH; ISSN: 0272-9172

PB Materials Research Society

DT Journal

LA English

CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

Section cross-reference(s): 76

AB Micromachining has potential applications for large area image sensors and displays, but conventional MEMS technol., based on cryst. Si wafers cannot be used. Instead, large area devices use deposited films on glass substrates. This presents many challenges for MEMS, both as regards materials for micro-machined structures and the integration with large area electronic devices. The authors are exploring the novel thick **photoresist** SU-8, as well as plating techniques for the fabrication of large area MEMS. As an example of its application, the authors have applied this MEMS technol. to improve the performance of an amorphous Si based image sensor array. SU-8 is explored as the structural material for the x-ray conversion screen and as a thick interlayer dielec. for the thin film readout electronics of the imager.

ST SU8 photolithog plating x ray imager; silicon x ray imager fabrication; **adhesion promotion** SU8 **photoresist**

IT Electrodeposition

Photolithography

(SU-8 photolithog. and plating for fabrication of x-ray imager from amorphous silicon)

IT Adhesion, physical

(of SU-8 to silicon nitride)

IT Optical imaging devices

(x-ray converters; SU-8 photolithog. and plating for fabrication of x-ray imager from amorphous silicon)

IT 7440-02-0P, Nickel, processes 7440-21-3P, Silicon, processes

RL: CPS (Chemical process); DEV (Device component use); PEP (Physical, engineering or chemical process); PYP (Physical process); SPN (Synthetic preparation); PREP (Preparation); PROC (Process); USES (Uses)

(SU-8 photolithog. and plating for fabrication of x-ray imager from amorphous silicon)

IT 221273-01-4, SU 8

RL: CPS (Chemical process); NUU (Other use, unclassified); PEP (Physical, engineering or chemical process); PROC (Process); USES (Uses)

(SU-8 photolithog. and plating for fabrication of x-ray imager from amorphous silicon)

IT 12033-89-5, Silicon nitride, uses 39314-47-1

RL: DEV (Device component use); USES (Uses)

(adhesion of SU-8 to)

IT 919-30-2, Aminopropyltriethoxysilane 2530-83-8, Glycidoxypropyltrimethoxysilane 439277-52-8, AP 300

RL: NUU (Other use, unclassified); USES (Uses)

(**adhesion promoter** for SU-8 **photoresist**)

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

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(2) Daniel, J; Proc American Vacuum Society, 47th International Symposium

(3) Lorenz, H; Sensors and Actuators 1998, VA64, P33 CA

(4) Mulato, M; Proc SPIE, Physics of Medical Imaging 2000, V3977, P26

(5) Rahn, J; Proc SPIE Conf On Physics of Medical Imaging 1999, V3659, P510

AN 135:38836 CA
 TI Large-area MEMS fabrication with thick SU-8 **photoresist** applied
 to an x-ray image sensor array
 AU Daniel, Jurgen H.; Krusor, Brent S.; Apte, Raj B.; Street, Robert A.;
 Goredema, Adela; McCallum, Jason; Boils-Boissier, Daniele C.; Kazmaier,
 Peter M.
 CS Xerox Palo Alto Research Center, Palo Alto, CA, 94304, USA
 SO Proceedings of SPIE-The International Society for Optical Engineering
 (2000), 4174 (Micromachining and Microfabrication Process Technology VI),
 40-48
 CODEN: PSISDG; ISSN: 0277-786X
 PB SPIE-The International Society for Optical Engineering
 DT Journal
 LA English
 CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other
 Reprographic Processes)
 AB MEMS fabrication on large area substrates is promising for novel system
 concepts, but processes based on cryst. silicon cannot be used. Polymeric
 materials such as the thick **photoresist** SU-8 are more
 appropriate for this purpose because their processing can be scaled to
 large areas. An x-ray image sensor array based on amorphous silicon on
 glass substrates was taken as an examples to apply the SU-8
 microfabrication technique. The authors anticipate an improved
 performance of the imager. The resoln. of the x-ray imager is expected to
 increase by patterning the x-ray conversion screen into cells, which match
 the sensor pixels of the imager, and SU-8 defines these cells.
 Furthermore, SU-8 functions as a thick interlayer dielec. with decrease
 the electronic noise and result in a higher sensitivity of the imager.
 The fabrication process with SU-8 will be described and challenging
 issues, esp. when considering large area substrates, will be discussed.
 ST microfabrication x ray image sensor array thick SU8 **photoresist**
 IT Radiography
 (digital; microfabrication of amorphous Si on glass substrates x-ray
 image sensor array using thick **photoresist** SU-8 process)
 IT Micromachining
Photoresists
 (microfabrication of amorphous Si on glass substrates x-ray image
 sensor array using thick **photoresist** SU-8 process)
 IT Electric insulators
 Electrodeposition
 (microfabrication of x-ray image sensor array using thick
photoresist SU-8 process and application of SR-U as interlayer
 dielec.)
 IT Optical imaging sensors
 (x-ray; microfabrication of amorphous Si on glass substrates x-ray
 image sensor array using thick **photoresist** SU-8 process)
 IT 2530-83-8, 3-Glycidoxypropyltrimethoxysilane
 RL: NUU (Other use, unclassified); USES (Uses)
 (adhesion promoter; microfabrication of x-ray image
 sensor array using thick **photoresist** SU-8 process and
 application of SR-U as interlayer dielec.)
 IT 7440-21-3, Silicon, processes
 RL: DEV (Device component use); PEP (Physical, engineering or chemical
 process); PROC (Process); USES (Uses)
 (amorphous; microfabrication of amorphous Si on glass substrates x-ray
 image sensor array using thick **photoresist** SU-8 process)
 IT 37265-36-4, gadolinium oxysulfide
 RL: DEV (Device component use); USES (Uses)
 (microfabrication of amorphous Si on glass substrates x-ray image
 sensor array using thick **photoresist** SU-8 process)
 IT 7429-90-5, Aluminum, processes
 RL: DEV (Device component use); PEP (Physical, engineering or chemical
 process); PROC (Process); USES (Uses)
 (microfabrication of amorphous Si on glass substrates x-ray image
 sensor array using thick **photoresist** SU-8 process)

IT 7440-27-9, Terbium, uses
 RL: MOA (Modifier or additive use); USES (Uses)
 (microfabrication of amorphous Si on glass substrates x-ray image sensor array using thick **photoresist** SU-8 process)

IT 221273-01-4, SU-8 **photoresist**
 RL: PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)
 (microfabrication of amorphous Si on glass substrates x-ray image sensor array using thick **photoresist** SU-8 process)

IT 37757-92-9
 RL: NUU (Other use, unclassified); USES (Uses)
 (monomer additive; microfabrication of x-ray image sensor array using thick **photoresist** SU-8 process and application of SR-U as interlayer dielec.)

IT 7782-44-7, Oxygen, processes
 RL: PEP (Physical, engineering or chemical process); PROC (Process)
 (plasma; microfabrication of amorphous Si on glass substrates x-ray image sensor array using thick **photoresist** SU-8 process)

IT 2551-62-4, Sulfur hexafluoride
 RL: NUU (Other use, unclassified); USES (Uses)
 (plasma; microfabrication of x-ray image sensor array using thick **photoresist** SU-8 process and application of SR-U as interlayer dielec.)

IT 7440-02-0, Nickel, uses 7440-32-6, Titanium, uses
 RL: NUU (Other use, unclassified); USES (Uses)
 (seed layer; microfabrication of x-ray image sensor array using thick **photoresist** SU-8 process and application of SR-U as interlayer dielec.)

RE.CNT 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD
 RE

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- (2) Gelorme, J; US 4882245 1989 CA
- (3) Guerin, L; Display Works 1998
- (4) Guerin, L; Eurosensor 12 1998
- (5) Guerin, L; SOTEC Microsystems 1999
- (6) Lorenz, H; Sensors and Actuators 1998, VA64, P33 CA
- (7) Mallory, G; AESF
- (8) Mulato, M; Proc SPIE Conf On Physics of Medical Imaging 2000, V3977, P26
- (9) Rahn, J; Proc SPIE Conf On Physics of Medical Imaging 1999, V3659, P510
- (10) Shaw, J; IBM J Res Develop 1997, V41, P81 CA
- (11) Singer, P; Semiconductor International 1997, V20, P79 CA
- (12) Street, R; Springer Series in Materials Science 2000, 37
- (13) Thorpe, J; Electronic Letters 1998, V34, P1237

L21 ANSWER 3 OF 6 CA COPYRIGHT 2003 ACS

AN 112:149065 CA

TI Photosensitive polyimide compositions with good adhesive properties and storability

IN Sakuma, Tetsuo; Ai, Hideo

PA Asahi Chemical Industry Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 14 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM C09D003-49

CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 01172465	A2	19890707	JP 1987-329612	19871228
	JP 2627632	B2	19970709		
PRAI	JP 1987-329612		19871228		

AB The title compns. forming patterns showing good adhesion after development or curing contain a polyimide (or precursor) soln. and amino

silane-modified arom. polycarboxylic acid.

ST photosensitive polyimide **adhesion promoter**; amino silane modified carboxylic acid; **photoresist** polyimide **adhesion promoter**

IT Polyimides, uses and miscellaneous
RL: USES (Uses)
(acids, photosensitive, **adhesion promoters** for, amino silane-modified polycarboxylic acids and)

IT Resists
(photo-, polyimides, **adhesion promoters** for, amino silane-modified polycarboxylic acid)

IT **Adhesion**
(**promoters**, amino silane-modified polycarboxylic acids, for photosensitive polyimides)

IT 89-32-7D, Pyromellitic dianhydride, reaction products with aminosilanes 919-30-2D, 3-Aminopropyltriethoxysilane, reaction products with arom. polycarboxylic anhydrides 2420-87-3D, [5,5'-Biisobenzofuran]-1,1',3,3'-tetrone, reaction products with aminosilanes 2421-28-5D, reaction products with aminosilanes 3179-76-8D, 3-Aminopropyltriethoxymethylsilane, reaction products with arom. polycarboxylic anhydrides 13822-56-5D, 3-Aminopropyltrimethoxysilane, reaction products with arom. polycarboxylic anhydrides 33976-43-1D, p-Aminophenyltrimethoxysilane, reaction products with arom. polycarboxylic anhydrides
RL: USES (Uses)
(**adhesion promoters**, for photosensitive polyimides)

IT 9078-85-7 25038-81-7, Pyralin 2555 39421-28-8 78869-48-4 110494-54-7, Selectilux HTR 2
RL: USES (Uses)
(photosensitive compns. contg., **adhesion promoters** for, aminosilane-modified arom. polycarboxylic acids as)

L21 ANSWER 4 OF 6 CA COPYRIGHT 2003 ACS

AN 109:181877 CA

TI **Adhesion-promoting** product and process for treating an integrated-circuit substrate

IN Brewer, Terry; Flaim, Tony D.; Moss, Mary G.

PA Brewer Science, Inc., USA

SO U.S., 5 pp.

CODEN: USXXAM

DT Patent

LA English

IC B05D005-12; B03C001-495

NCL 437228000

CC 76-3 (Electric Phenomena)

Section cross-reference(s): 74

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 4732858	A	19880322	US 1986-908346	19860917
	JP 63078540	A2	19880408	JP 1987-223220	19870908
	EP 260977	A2	19880323	EP 1987-308257	19870917
	EP 260977	A3	19880601		

R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE

PRAI US 1986-908346 19860917

AB In a method for photolithog. prodn. of microelectronic components using **photoresists**, a soln. of **adhesion-promoting** organosilane and a hydroxylic solvent contg., e.g., MeOH and H₂O is applied to the substrate. The **adhesion promotion** may be further improved by adding a catalyst (e.g., NH₃/H₂O-sol. amine) and/or a polymer (e.g., Me cellulose).

ST **adhesion promotion photoresist** integrated circuit substrate; organosilane hydroxylic solvent **photoresist** **adhesion promotion**

IT Alcohols, uses and miscellaneous

RL: USES (Uses)

(**adhesion promoters** contg., for
photoresists for integrated-circuit substrates)

IT **Adhesion**

(**promoters** of, of **photoresists** to
integrated-circuit substrates, organosilane/hydroxylic solvents for)

IT Electric circuits

(integrated, **adhesion-promoting**
organosilane/hydroxylic solvents for **photoresists** for)

IT 64-17-5, Ethanol, uses and miscellaneous 67-56-1, Methanol, uses and
miscellaneous 67-63-0, Isopropanol, uses and miscellaneous 71-23-8,
Propanol, uses and miscellaneous 110-80-5, Ethylene glycol ethyl ether
141-43-5, Ethanolamine, uses and miscellaneous 780-69-8,
Phenyltriethoxysilane 919-30-2, 3-Aminopropyltriethoxysilane
1320-67-8, Propylene glycol methyl ether 1646-59-9 1760-24-3,
N-Aminoethyl-3-aminopropyltrimethoxysilane 2530-83-8,
3-Glycidoxypropyltrimethoxysilane 2530-85-0,
Methacryloxypropyltrimethoxysilane 4420-74-0,
3-Mercaptopropyltrimethoxysilane 5089-70-3, 3-
Chloropropyltriethoxysilane 7003-80-7, p-Aminophenyltriethoxysilane
9002-98-6 9004-67-5, Methyl cellulose 27326-65-4, .beta.-
Trimethoxysilylethyl-2-pyridine 54077-45-1 70851-51-3,
N-Trimethoxysilylpropylimidazole 74113-77-2

RL: USES (Uses)

(**adhesion promoters** contg., for
photoresists for integrated circuit substrates)

IT 7803-62-5D, Silane, compds.

RL: TEM (Technical or engineered material use); USES (Uses)

(organo-, hydroxylic solvents and, as **adhesion**
promoters for **photoresists** for integrated circuits)

L21 ANSWER 5 OF 6 CA COPYRIGHT 2003 ACS

AN 109:139199 CA

TI **Adhesion promoting** product containing alkoxysilane and
process for treating an integrated circuit substrate therewith

IN Brewer, Terry; Flaim, Tony D.; Moss, Mary G.

PA Brewer Science, Inc., USA

SO Eur. Pat. Appl., 9 pp.

CODEN: EPXXDW

DT Patent

LA English

IC ICM G03F007-02

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other
Reprographic Processes)

Section cross-reference(s): 76

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 260976	A2	19880323	EP 1987-308256	19870917
	EP 260976	A3	19880803		

R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE

US 4950583	A	19900821	US 1986-908360	19860917
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JP 63077123	A2	19880407	JP 1987-223219	19870908
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PRAI US 1986-908360 19860917

AB A method of producing microelectronic components by photolithog. uses a
new **adhesion promoter** from an alkoxysilane such as an
aminophenylalkoxysilane, a nonamino arom. alkoxysilane, a nonamino
chloroalkylalkoxysilane or a nonamino acrylic alkoxysilane. Optionally,
the **adhesion promoter** compn. contains an adjuvant
polymer and an **adhesion promoting** catalyst. The
compn. improves the adhesion of the microelectronic coating (e.g., from a
photoresist) to the substrate. Thus, a compn. contg.
methacryloxypropyltrimethoxysilane, isopropanol and ethanolamine produced
improved adhesion of the pos. **photoresist** to a substrate e.g.,
Si and Si nitride.

ST **photoresist adhesion promoter** alkoxysilane;
 photolithog electronic component **adhesion promoter**

IT Electric circuits
 (microelectronic, **adhesion promoting agent** for,
 alkoxysilane as)

IT **Adhesion**
 (**promoting agent**, for **photoresist**, alkoxysilane as)

IT Resists
 (photo-, **adhesion promoting agent** for, alkoxysilane
 as)

IT Lithography
 (photo-, microelectronic component by, **adhesion
 promoting agent** for, alkoxysilane as)

IT 780-69-8, Phenyltriethoxysilane 1646-59-9 1760-24-3 2530-83-8
 4420-74-0, 3-Mercaptopropyltrimethoxysilane 7003-80-7,
 (p-Aminophenyl)triethoxysilane 13822-56-5, 3-
 Aminopropyltrimethoxysilane 27326-65-4 58068-97-6,
 4,5-Dihydro-1-(3-(triethoxysilyl)propyl)-1H-imidazole 70851-51-3,
 N-Trimethoxysilylpropylimidazole 74113-77-2
 RL: USES (Uses)
 (**adhesion promoting agent**, for microelectronic
 component)

IT 64-19-7, Acetic acid, uses and miscellaneous 141-43-5, Ethanolamine,
 uses and miscellaneous
 RL: USES (Uses)
 (**adhesion promoting catalyst**, for microelectronic
 components)

IT 2530-85-0 9002-98-6 9004-67-5, Methyl cellulose 54077-45-1
 RL: USES (Uses)
 (**adhesion promoting compn. contg.** alkoxysilane and,
 for microelectronic components)

L21 ANSWER 6 OF 6 CA COPYRIGHT 2003 ACS
 AN 80:21445 CA
 TI Photopolymerizable compositions and elements containing organosilanes
 IN Roos, Leo
 PA du Pont de Nemours, E. I., and Co.
 SO U.S., 8 pp.
 CODEN: USXXAM
 DT Patent
 LA English
 IC G03C
 NCL 096083000
 CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic Processes)
 Section cross-reference(s): 71

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 3758306	A	19730911	US 1971-128191	19710325
PRAI	US 1971-128191		19710325		

AB The adhesion and wettability of addn.-polymerizable ethylenically unsatd.
photoresist photopolymers, esp. poly(alkyl methacrylate), to
 glass, metal, or ceramics in printed circuit manuf. are improved by
 incorporating in the **photoresist** coating compn. 0.5-15 wt. % of
 a silane or polysilane. Thus, a **photoresist** coating compn.
 contains poly(methyl methacrylate) (I) (mol. wt. 30,000) 4, I of mol. wt.
 60,000 1.5, triethylene glycol diacetate 8, trimethylolpropane triacrylate
 4 g, 1% 2-tert-butylanthraquinone in MeOH 6 ml, 2,2'-dihydroxy-4-
 methoxybenzophenone 1 ml, and methylene chloride to make 160 g, plus an
 addnl. 0.5 ml of .gamma.-methacryloxypropyltrimethoxysilane. With resists
 obtained with this compn. on Si wafers, etchant undercutting is not obsd.

ST silane **photoresist** semiconductor etching; photopolymer silane
adhesion promoter

IT Siloxanes and Silicones, uses and miscellaneous
 RL: USES (Uses)

(dimethyl, **photoresists** contg. poly(alkyl methacrylates) and,
for printed circuits)

IT Resists
(photo-, poly(alkyl methacrylate)-silane coatings as, for printed
circuits)

IT Rubber, chlorinated
(**photoresists** contg. silanes and, for printed circuits)

IT Electric circuits
(**photoresists** for, of silane-poly(alkyl methacrylate) mixts.).

IT Polyamides, uses and miscellaneous
RL: USES (Uses)
(**photoresists**, contg. silane adhesives, for printed circuits)

IT Adhesives
(silanes, for methyl methacrylate polymer **photoresists** for
printed circuits)

IT 75-94-5 2996-92-1 51749-68-9 51749-69-0 51749-71-4
RL: USES (Uses)
(**photoresists** contg. methyl methacrylate polymers and, for
printed circuits)

IT 78-08-0
RL: USES (Uses)
(**photoresists** contg. poly(alkyl methacrylates) and, for
printed circuits)

IT 9011-14-7
RL: USES (Uses)
(**photoresists** contg. silanes and)

IT 9003-00-3 9003-20-7 9003-22-9 9004-36-8 25086-15-1 28136-81-4
RL: USES (Uses)
(**photoresists** contg. silanes and, for printed circuits)

IT 2530-85-0 51749-67-8
RL: USES (Uses)
(**photoresists** contg., for printed circuits)

IT 115-21-9 919-30-2 1067-53-4 1760-24-3 2530-83-8
2761-24-2 3388-04-3
RL: USES (Uses)
(**photoresists** from methyl methacrylate polymers and, for
printed circuits)

IT 41685-91-0
RL: USES (Uses)
(**photoresists**, for printed circuits)

=> s su 8

25271 SU

2315054 8

L22 455 SU 8

(SU(W) 8)

=> d his

(FILE 'HOME' ENTERED AT 19:09:55 ON 09 MAR 2003)

FILE 'REGISTRY' ENTERED AT 19:10:01 ON 09 MAR 2003

L1 1 S SU 8/CN
L2 1 S DOP/CN
L3 0 S GPTMS/CN
L4 0 S GLYCIDOXYPROPANE TRIMETHOXY-SILANE
L5 0 S GLYCIDOXYPROPANE TRIMETHOXY-SILANE
L6 0 S GLYCIDOXYPROPANE AND TRIMETHOXY-SILANE
L7 282 S GLYCIDOXYPROPANE AND TRIMETHOXY-SILANE
L8 280 S L7 AND PROPYL
L9 94 S MERCAPTOPROPYL AND TRIMETHOXY-SILANE
L10 262 S AMINOPROPYL AND TRIMETHOXY-SILANE
L11 45 S DIGLYCIDYL AND HEXAHYDROPHTHALATE
L12 1458 S DOP

L13 1 S DOP/CN

FILE 'CA' ENTERED AT 19:18:34 ON 09 MAR 2003

L14 0 S L1 AND L13

L15 204 S EPOXY RESIN AND L13

FILE 'REGISTRY' ENTERED AT 19:18:58 ON 09 MAR 2003

L16 2 S 2530-83-8 OR 4420-74-0 OR 13822-36-5

L17 3 S 2530-83-8 OR 4420-74-0 OR 13822-56-5

FILE 'CA' ENTERED AT 19:19:59 ON 09 MAR 2003

L18 42 S L17 AND L13

L19 6 S L18 AND EPOXY

L20 82 S L17 AND PHOTORESIST?

L21 6 S L20 AND ADHESION PROMOT?

L22 455 S SU 8

=> s l22 and l17

9642 L17

L23 4 L22 AND L17

=> s l23 not l21

L24 2 L23 NOT L21

=> d all 1-2

L24 ANSWER 1 OF 2 CA COPYRIGHT 2003 ACS

AN 138:52109 CA

TI Polymer hydrogel microelectrodes for neural communication

AU Nyberg, Tobias; Ingnas, Olle; Jerregard, Helena

CS Laboratory of Applied Physics, Department of Physics and Measurement Technology, Linkopings Universitet, Linkoping, S-581 83, Swed.

SO Biomedical Microdevices (2002), 4(1), 43-52

CODEN: BMICFC; ISSN: 1387-2176

PB Kluwer Academic Publishers

DT Journal

LA English

CC 9-1 (Biochemical Methods)

AB A conducting polymer hydrogel electrode was electrochem. deposited in micromachined via holes and the charge delivery capacity (CDC) was studied. Polymer hydrogel microelectrodes, with a geometric area of 1000 .mu.m2, and a capacitance of up to 850 nF were fabricated. The impedance of a 1,000 .mu.m2 polymer hydrogel electrode deposited with 8 .mu.C was measured as low as 8.5 k.OMEGA.. We studied neural cell growth on structures to be used as neural interfaces. Directed cell growth was achieved by imposing a topog. structure on the substrate. Due to the interesting mech. and chem. adaptability of the polymer hydrogel material and its large charge delivery capacity and low impedance we think that it is an interesting material for neural communication.

ST polymer hydrogel microelectrode neuron communication cell growth

IT Laminins

RL: BSU (Biological study, unclassified); BIOL (Biological study)

(coating for neural chips; polymer hydrogel microelectrodes for neural communication)

IT Animal tissue culture

(dorsal root ganglia neurons; polymer hydrogel microelectrodes for neural communication)

IT Polymerization

(electrochem.; polymer hydrogel microelectrodes for neural communication)

IT Microarray technology

Nerve

(neural chips; polymer hydrogel microelectrodes for neural communication)

IT Cell proliferation

Conducting polymers
Cyclic voltammetry
Hydrogels
Microelectrodes

- (polymer hydrogel microelectrodes for neural communication)
- IT 25104-18-1, Poly-L-lysine 208666-95-9, ECM gel
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(coating for neural chips; polymer hydrogel microelectrodes for neural communication)
- IT 155090-83-8
RL: DEV (Device component use); USES (Uses)
(conducting polymer; polymer hydrogel microelectrodes for neural communication)
- IT 872-50-4, 1-Methyl-2-pyrrolidinone, uses 2530-83-8,
3-Glycidooxy-propyltrimethoxysilane
RL: NUU (Other use, unclassified); USES (Uses)
(for increasing the adhesion of PDMS/PEDOT-PSS; polymer hydrogel microelectrodes for neural communication)
- IT 7440-21-3, Silicon, uses 7440-47-3, Chromium, uses 9016-00-6,
Polydimethylsiloxane 30604-81-0, Polypyrrole 31900-57-9,
Polydimethylsiloxane 221314-67-6, SU-8/5
RL: DEV (Device component use); USES (Uses)
(polymer hydrogel microelectrodes for neural communication)

RE.CNT 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

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- (30) Stieglitz, T; Sensors and Actuators A: Physical 1997, V60, P240
- (31) Ulbrich, M; Advanced Materials 2001, V13, P344 CA
- (32) Valderrama, E; Transducers '95, Eurosensors ix 1995, V1, P63
- (33) Wallman, L; Biomaterials 2001, V22, P1187 CA
- (34) Wallman, L; IEEE Trans Biomed Eng 1999, V46, P1065 MEDLINE
- (35) Warman, E; IEEE Trans Biomed Eng 1992, V39, P1244 MEDLINE

L24 ANSWER 2 OF 2 CA COPYRIGHT 2003 ACS

AN 130:253730 CA

TI Water-based primer compositions and their application with good adhesion

to metal substrates
 IN Kohli, Dalip; Dickerson, Elaine
 PA Cytec Technology Corp., USA
 SO PCT Int. Appl., 61 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 IC ICM C09D005-00
 ICS C09D163-00
 CC 42-7 (Coatings, Inks, and Related Products)
 Section cross-reference(s): 55, 56

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9914277	A1	19990325	WO 1998-US18092	19980901
	W: AL, AM, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CU, CZ, EE, GE, GH, GM, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, RO, RU, SD, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	TW 457284	B	20011001	TW 1998-87113124	19980810
	CA 2303028	AA	19990325	CA 1998-2303028	19980901
	AU 9891280	A1	19990405	AU 1998-91280	19980901
	AU 755001	B2	20021128		
	EP 1021488	A1	20000726	EP 1998-943502	19980901
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, IE, FI				
	BR 9812073	A	20000926	BR 1998-12073	19980901
	JP 2001516788	T2	20011002	JP 2000-511820	19980901
	US 6475621	B1	20021105	US 1998-152073	19980911
	NO 2000001286	A	20000508	NO 2000-1286	20000310
PRAI	US 1997-58719P	P	19970912		
	WO 1998-US18092	W	19980901		
AB	The title primer compn. includes an aq. dispersion of (a) .gtoreq.1 thermosetting resin curable at an elevated temp., (b) .gtoreq.1 organosilane contg. .gtoreq.1 hydrolyzable group, and (c) a curing agent. The aq. primer compn. contains substantially no volatile org. solvent, is environmentally superior to solvent-based primers, is storage stable, exhibits excellent solvent resistance and performs without loss of phys. properties. A primer contg. Z 6040 1, Epi-Rez Su-8 10.6, Der 669 epoxy resin 13.5, bisphenol A-epichlorohydrin resin dispersion 45.5, 2,2-bis-4-(4-aminophenoxy)phenyl propane 10.2, urea deriv. 3.0, silica 1.8, yellow dye 0.3, and Sr chromate 15 parts and water was used to prime Al panels.				
ST	corrosion resistance aq primer adhesion metal; adhesion promoter silane aq primer metal; thermoset binder epoxy primer metal; amine cure agent epoxy primer metal				
IT	Polyimides, uses				
	RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)				
	(bismaleimide-based; in water-based, low (no) volatile org. solvent primer compns. with good adhesion to metal parts)				
IT	Epoxy resins, uses				
	Phenolic resins, uses				
	RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)				
	(in water-based, low (no) volatile org. solvent primer compns. with good adhesion to metal parts)				
IT	Adhesion promoters				
	(silanes; in water-based, low (no) volatile org. solvent primer compns. with good adhesion to metal parts)				
IT	Primers (paints)				
	(solvent-resistant water-thinned; water-based, low (no) volatile org.				

solvent primer compns. with good adhesion to metal parts)

IT Polyesters, uses
 RL: PRP (Properties); TEM (Technical or engineered material use); USES
 (Uses)
 (unsatd.; in water-based, low (no) volatile org. solvent primer compns.
 with good adhesion to metal parts)

IT 919-30-2, A 1100 2530-83-8, Z 6040 2897-60-1,
 (3-Glycidoxypropyl)diethoxymethylsilane 3068-76-6, N-Phenyl-..gamma...
 aminopropyltrimethoxysilane 3388-04-3, (..beta...-3,4-
 Epoxycyclohexyl)ethyltrimethoxysilane 4420-74-0,
 ..gamma...-Mercaptopropyltrimethoxysilane 82985-35-1,
 Bis(..gamma...-trimethoxysilylpropyl)amine
 RL: PRP (Properties); TEM (Technical or engineered material use); USES
 (Uses)
 (adhesion promoter; in water-based, low (no) volatile org. solvent
 primer compns. with good adhesion to metal parts)

IT 13080-86-9
 RL: PRP (Properties); TEM (Technical or engineered material use); USES
 (Uses)
 (cure agent; in water-based, low (no) volatile org. solvent primer
 compns. with good adhesion to metal parts)

IT 9003-35-4, BRr 5555 25068-38-6, Der 669 62386-33-8, Matrimid 5292
 64112-84-1, Epi-Rez Su-8 115773-92-7, PKHW 35
 221629-28-3, Epi-Rez 3519W50
 RL: PRP (Properties); TEM (Technical or engineered material use); USES
 (Uses)
 (in water-based, low (no) volatile org. solvent primer compns. with
 good adhesion to metal parts)

IT 7429-90-5, Aluminum, miscellaneous 12597-69-2, Steel, miscellaneous
 60608-23-3, Ti-6AL-4V ELI
 RL: MSC (Miscellaneous)
 (water-based, low (no) volatile org. solvent primer compns. with good
 adhesion to metal parts)

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
 RE
 (1) Cytec Tech Corp; WO 9406876 A 1994 CA
 (2) Schmidt, L; US 4001154 A 1977 CA
 (3) Wyatt, P; US 4056208 A 1977

=> d his

(FILE 'HOME' ENTERED AT 19:09:55 ON 09 MAR 2003)

FILE 'REGISTRY' ENTERED AT 19:10:01 ON 09 MAR 2003

L1 1 S SU 8/CN
 L2 1 S DOP/CN
 L3 0 S GPTMS/CN
 L4 0 S GLYCIDOXYPROPANE TRIMETHOXYISILANE
 L5 0 S GLYCIDOXYPROPANETRIMETHOXYISILANE
 L6 0 S GLYCIDOXYPROPANE AND TRIMETHOXYISILANE
 L7 282 S GLYCIDOXYPROPANE AND TRIMETHOXYISILANE
 L8 280 S L7 AND PROPYL
 L9 94 S MERCAPTOPROPYL AND TRIMETHOXYISILANE
 L10 262 S AMINOPROPYL AND TRIMETHOXYISILANE
 L11 45 S DIGLYCIDYL AND HEXAHYDROPHTHALATE
 L12 1458 S DOP
 L13 1 S DOP/CN

FILE 'CA' ENTERED AT 19:18:34 ON 09 MAR 2003

L14 0 S L1 AND L13
 L15 204 S EPOXY RESIN AND L13

FILE 'REGISTRY' ENTERED AT 19:18:58 ON 09 MAR 2003

L16 2 S 2530-83-8 OR 4420-74-0 OR 13822-36-5

L17 3 S 2530-83-8 OR 4420-74-0 OR 13822-56-5

FILE 'CA' ENTERED AT 19:19:59 ON 09 MAR 2003

L18 42 S L17 AND L13
L19 6 S L18 AND EPOXY
L20 82 S L17 AND PHOTORESIST?
L21 6 S L20 AND ADHESION PROMOT?
L22 455 S SU 8
L23 4 S L22 AND L17
L24 2 S L23 NOT L21

=> s l22 and l13

11302 L13

L25 1 L22 AND L13

=> d all

L25 ANSWER 1 OF 1 CA COPYRIGHT 2003 ACS

AN 108:222440 CA

TI Calibration of high performance size exclusion chromatography for small epoxy molecules

AU Russell, David J.

CS Syst. Technol. Div., Int. Bus. Mach. Corp., Endicott, NY, 13760, USA

SO Journal of Liquid Chromatography (1988), 11(2), 383-94

CODEN: JLCHD8; ISSN: 0148-3919

DT Journal

LA English

CC 37-5 (Plastics Manufacture and Processing)

Section cross-reference(s): 80

AB Many epoxy resin formulations contained small oligomers (e.g., <1000 mol. wt. units) as left over starting materials, reaction byproducts, or as active parts of the formulation. Modern high-performance size exclusion columns were available which enabled mol. wts. of these oligomers to be detd. if proper calibration techniques were employed. Data were presented which demonstrated the differences in calibration curves for epoxy mols. and polystyrene stds., n-alkanes, and phthalate esters for mol. wts. <1000 g/mol. Low-mol.-wt. epoxies were used to calibrate directly for epoxies rather than using mol. size conversion factors calcd. from other stds. such as polystyrenes.

ST epoxy resin oligomer chromatog calibration

IT Epoxy resins, analysis

RL: ANST (Analytical study)

(mixts. with small epoxy stds., high-performance size-exclusion chromatog. of, calibration methods for)

IT Chromatography, gel

(high-performance, calibration of, for small epoxy mols.)

IT 84-66-2, Diethyl phthalate 84-74-2, Dibutyl phthalate 111-65-9, n-Octane, uses and miscellaneous 112-40-3, Dodecane 117-81-7, Di-2-ethylhexyl phthalate 131-11-3, Dimethyl phthalate 544-85-4 593-45-3, Octadecane 630-02-4, Octacosane 630-06-8, Hexatriacontane 646-31-1, Tetracosane 26761-40-0, Diisodecyl phthalate

RL: USES (Uses)

(calibration of high-performance size-exclusion chromatog. with, for small epoxy mols.)

IT 66072-39-7, XD-7342

RL: USES (Uses)

(epoxy resin mixts. with XD-7342, high-performance size-exclusion chromatog. of, calibration methods for)

IT 122-60-1, 1,2-Epoxy-3-phenoxy-propane 285-67-6, Cyclopentene oxide 7659-57-6 78565-37-4, X-22

RL: USES (Uses)

(epoxy resin mixts., high-performance size-exclusion chromatog. of, calibration methods for)

IT 64112-84-1

RL: USES (Uses)

(mixts. with small epoxy stds., Epirez SU-8,
high-performance size-exclusion chromatog. of, calibration methods for)
IT 9003-53-6, Polystyrene
RL: PRP (Properties)
(oligomers, calibration of high-performance size-exclusion chromatog.
with, for small epoxy mols.)

=> FIL STNGUIDE

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	53.49	175.88

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-9.30	-9.30

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FILE CONTAINS CURRENT INFORMATION.
LAST RELOADED: Mar 7, 2003 (20030307/UP).

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(FILE 'HOME' ENTERED AT 19:09:55 ON 09 MAR 2003)

FILE 'REGISTRY' ENTERED AT 19:10:01 ON 09 MAR 2003

L1	1 S SU 8/CN
L2	1 S DOP/CN
L3	0 S GPTMS/CN
L4	0 S GLYCIDOXYPROPANE TRIMETHOXY-SILANE
L5	0 S GLYCIDOXYPROPANETRIMETHOXY-SILANE
L6	0 S GLYCIDOXYPROPANE AND TRIMETHOXY-SILANE
L7	282 S GLYCIDOXYPROPANE AND TRIMETHOXY-SILANE
L8	280 S L7 AND PROPYL
L9	94 S MERCAPTOPROPYL AND TRIMETHOXY-SILANE
L10	262 S AMINOPROPYL AND TRIMETHOXY-SILANE
L11	45 S DIGLYCIDYL AND HEXAHYDRO-PHTHALATE
L12	1458 S DOP
L13	1 S DOP/CN

FILE 'CA' ENTERED AT 19:18:34 ON 09 MAR 2003

L14	0 S L1 AND L13
L15	204 S EPOXY RESIN AND L13

FILE 'REGISTRY' ENTERED AT 19:18:58 ON 09 MAR 2003

L16	2 S 2530-83-8 OR 4420-74-0 OR 13822-36-5
L17	3 S 2530-83-8 OR 4420-74-0 OR 13822-56-5

FILE 'CA' ENTERED AT 19:19:59 ON 09 MAR 2003

L18	42 S L17 AND L13
L19	6 S L18 AND EPOXY
L20	82 S L17 AND PHOTORESIST?
L21	6 S L20 AND ADHESION PROMOT?
L22	455 S SU 8
L23	4 S L22 AND L17
L24	2 S L23 NOT L21
L25	1 S L22 AND L13

FILE 'STNGUIDE' ENTERED AT 19:27:12 ON 09 MAR 2003

=> file ca

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
FULL ESTIMATED COST	ENTRY	SESSION
	0.06	175.94
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
CA SUBSCRIBER PRICE	ENTRY	SESSION
	0.00	-9.30

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FILE COVERS 1907 - 6 Mar 2003 VOL 138 ISS 11
 FILE LAST UPDATED: 6 Mar 2003 (20030306/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

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(FILE 'HOME' ENTERED AT 19:09:55 ON 09 MAR 2003)

FILE 'REGISTRY' ENTERED AT 19:10:01 ON 09 MAR 2003

L1	1 S SU 8/CN
L2	1 S DOP/CN
L3	0 S GPTMS/CN
L4	0 S GLYCIDOXYPROPANE TRIMETHOXY-SILANE
L5	0 S GLYCIDOXYPROPANETRIMETHOXY-SILANE
L6	0 S GLYCIDOXYPROPANE AND TRIMETHOXY-SILANE
L7	282 S GLYCIDOXY AND TRIMETHOXY-SILANE
L8	280 S L7 AND PROPYL
L9	94 S MERCAPTOPROPYL AND TRIMETHOXY-SILANE
L10	262 S AMINOPROPYL AND TRIMETHOXY-SILANE
L11	45 S DIGLYCIDYL AND HEXAHYDRO-PHTHALATE
L12	1458 S DOP
L13	1 S DOP/CN

FILE 'CA' ENTERED AT 19:18:34 ON 09 MAR 2003

L14	0 S L1 AND L13
L15	204 S EPOXY RESIN AND L13

FILE 'REGISTRY' ENTERED AT 19:18:58 ON 09 MAR 2003

L16	2 S 2530-83-8 OR 4420-74-0 OR 13822-36-5
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FILE 'CA' ENTERED AT 19:19:59 ON 09 MAR 2003

L18	42 S L17 AND L13
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L22	455 S SU 8
L23	4 S L22 AND L17

L24 2 S L23 NOT L21
L25 1 S L22 AND L13

FILE 'STNGUIDE' ENTERED AT 19:27:12 ON 09 MAR 2003

FILE 'CA' ENTERED AT 19:27:56 ON 09 MAR 2003

=> s l17 and l13

9642 L17

11302 L13

L26 42 L17 AND L13

=> s l26 not l19

L27 36 L26 NOT L19

=> d all 1-36

L27 ANSWER 1 OF 36 CA COPYRIGHT 2003 ACS

AN 138:56876 CA

TI Rapid curable composition containing silyl group-terminated vinyl polymer
excellent curability

IN Hasegawa, Nobuhiro; Nakagawa, Yoshiki

PA Kaneka Corporation, Japan

SO PCT Int. Appl., 105 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM C08F008-42

CC 37-6 (Plastics Manufacture and Processing)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003000749	A1	20030103	WO 2002-JP3539	20020409
	W: JP, US				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,				
	PT, SE, TR				

PRAI JP 2001-188550 A 20010621

AB A quick curing compn. comprises a vinyl polymer having a crosslinking
silyl group-terminated main chain, wherein the crosslinking silyl group is
represented by the general formula -SiY_aR_{3-a}, wherein R represents an
C1-C20 alkyl group, an C6-C20 aryl group, a C7-C20 alkyl group or a
triorganosiloxy group represented by (R') SiO-, R' is a univalent C1-C20
hydrocarbon group and the three R' groups may be the same or different,
and, when there are two or more R groups, they may be the same or
different; Y represents a hydroxyl group or a hydrolyzable group and, when
there are two or more Y groups, they may be the same or different; and a
represents 1, 2 or 3. Thus, a compn. with skinning time 0.3 h was prepd.
from reaction products of polybutyl acrylate, potassium undecenoate, and
trimethoxysilane in the presence of dibutyltin diacetylacetonate (U 220,
curing catalyst).

ST curing compn polybutyl acrylate potassium undecenoate trimethoxysilane

IT Linseed oil

Tung oil

RL: MOA (Modifier or additive use); USES (Uses)

(air oxidn. curing agent; prepn. rapid curable compn. contg. silyl
group-terminated vinyl polymer excellent curability)

IT Crosslinking agents

Crosslinking catalysts

" (prepn. rapid curable compn. contg. silyl group-terminated vinyl
polymer excellent curability)

IT Polysiloxanes, uses

RL: MOA (Modifier or additive use); USES (Uses)

(prepn. rapid curable compn. contg. silyl group-terminated vinyl
polymer excellent curability)

IT 471-34-1, Hakuenka CCR, uses

RL: MOA (Modifier or additive use); USES (Uses)
(Nanox 25A, filler; prepn. rapid curable compn. contg. silyl
group-terminated vinyl polymer excellent curability)

IT 2627-95-4D, 1,1,3,3-Tetramethyl-1,3-divinyldisiloxane, platinum complex
4288-15-7, Stannous octylate 7440-06-4D, Platinum, 1,1,3,3-tetramethyl-
1,3-divinyldisiloxane complex 22673-19-4, U 220
RL: CAT (Catalyst use); USES (Uses)
(curing catalyst; prepn. rapid curable compn. contg. silyl
group-terminated vinyl polymer excellent curability)

IT 124-22-1, Laurylamine
RL: CAT (Catalyst use); USES (Uses)
(curing promoter; prepn. rapid curable compn. contg. silyl
group-terminated vinyl polymer excellent curability)

IT 2768-02-7, Vinyltrimethoxysilane
RL: MOA (Modifier or additive use); USES (Uses)
(dehydrating agent; prepn. rapid curable compn. contg. silyl
group-terminated vinyl polymer excellent curability)

IT 11097-59-9, Kyowaad 500SH 54065-80-4, Kyowaad 700PEL
RL: MOA (Modifier or additive use); USES (Uses)
(filler; prepn. rapid curable compn. contg. silyl group-terminated
vinyl polymer excellent curability)

IT 6159-41-7P, 10-Undecenoic acid, potassium salt
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT
(Reactant or reagent)
(intermediate; prepn. rapid curable compn. contg. silyl
group-terminated vinyl polymer excellent curability)

IT 9003-17-2
RL: MOA (Modifier or additive use); USES (Uses)
(of 1,2-configuration, air oxidn. curing agent; prepn. rapid curable
compn. contg. silyl group-terminated vinyl polymer excellent
curability)

IT 10441-87-9, Trimethylolpropane triacetate 13051-30-4, Pentaerythritol
triacetate
RL: MOA (Modifier or additive use); USES (Uses)
(photocuring agent; prepn. rapid curable compn. contg. silyl
group-terminated vinyl polymer excellent curability)

IT 117-81-7, DOP 9003-07-0, PN 260
RL: MOA (Modifier or additive use); USES (Uses)
(plasticizer; prepn. rapid curable compn. contg. silyl group-terminated
vinyl polymer excellent curability)

IT 149-73-5
RL: CAT (Catalyst use); USES (Uses)
(prepn. rapid curable compn. contg. silyl group-terminated vinyl
polymer excellent curability)

IT 127-08-2DP, Potassium acetate, reaction products with Bu acrylate polymer
582-25-2DP, Potassium benzoate, reaction products with Bu
acrylate-1,7-octadiene copolymer 2487-90-3DP, Trimethoxysilane, reaction
products with alkenyl group-contg. polymer 4420-74-0DP,
3-Mercaptopropyltrimethoxysilane, reaction products with alkenyl
group-contg. polymer 9003-49-0DP, Butyl acrylate homopolymer, reaction
products with 10-undecenoic acid, potassium salt 9003-49-0P, Butyl
acrylate homopolymer 16881-77-9DP, Dimethoxymethylsilane, reaction
products with alkenyl group-contg. polymer 30600-43-2DP, Butyl
acrylate-2-hydroxyethyl methacrylate copolymer, reaction products with
isocyanatopropyltrimethoxysilane 137407-65-9DP, 1-(2-
Trimethoxysilylethyl)-1,1,3,3-tetramethyldisiloxane, reaction products
with alkenyl group-contg. polymer 221172-33-4DP, Butyl
acrylate-1,7-octadiene copolymer, reaction products with potassium
benzoate
RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP
(Properties); TEM (Technical or engineered material use); PREP
(Preparation); USES (Uses)
(prepn. rapid curable compn. contg. silyl group-terminated vinyl
polymer excellent curability)

IT 6159-41-7DP, 10-Undecenoic acid, potassium salt, reaction products with

poly(Bu acrylate)

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(prepn. rapid curable compn. contg. silyl group-terminated vinyl polymer excellent curability)

IT 77-99-6D, Trimethylolpropane, tris(trimethylsilyl) derivs. 999-97-3, Hexamethyldisilazane 1529-17-5, Trimethylphenoxysilane

RL: MOA (Modifier or additive use); USES (Uses)

(prepn. rapid curable compn. contg. silyl group-terminated vinyl polymer excellent curability)

IT 15396-00-6D, .gamma.-Isocyanatopropyltrimethoxysilane, reaction products with Bu acrylate-2-hydroxyethyl methacrylate copolymer

RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)

(prepn. rapid curable compn. contg. silyl group-terminated vinyl polymer excellent curability)

IT 112-38-9, 10-Undecenoic acid 865-47-4

RL: RCT (Reactant); RACT (Reactant or reagent)

(starting material; prepn. rapid curable compn. contg. silyl group-terminated vinyl polymer excellent curability)

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE

(1) Kaneka Corporation; JP 11-116617 A 1999 CA

(2) Kaneka Corporation; US 6274688 B1 1999 CA

(3) Kaneka Corporation; JP 200086998 A 2000

(4) Kaneka Corporation; EP 1182215 A2 2002 CA

(5) Kaneka Corporation; JP 200269119 A 2002

L27 ANSWER 2 OF 36 CA COPYRIGHT 2003 ACS

AN 135:227649 CA

TI Modification of thermoplastic polymers with scrap paper cellulose fibers. Part I. PVC compositions filled with scrap paper cellulose fibers

AU Pelka, Janina; Kowalska, Ewa

CS Inst. Chem. Przemyslowej im. Ignacego Moscickiego, Warsaw, 01-793, Pol.

SO Polimery (Warsaw) (2001), 46(3), 201-207

CODEN: POLIA4; ISSN: 0032-2725

PB Instytut Chemii Przemyslowej

DT Journal

LA Polish

CC 37-6 (Plastics Manufacture and Processing)

Section cross-reference(s): 43

AB The process of prepn. of PVC compns. filled with cellulosic fibers from scrap paper is presented. Cellulosic filler obtained by recycling of newsprint offers at the same time reutilization of the cellulosic material as well as prodn. of biodegradable plastics compns. The effect of compn. formulation (filler content, type and amt. of plasticizers, processing modifiers, coupling agent and others) on the mech. properties, water absorption, and structure homogeneity of the compns. was investigated. When 25-50 wt. parts of plasticizer per 100 wt. parts of PVC was added, it was possible to introduce max. up to 60 wt. parts of cellulosic fibers per 100 wt. parts of PVC. Aminosilane appeared to be the most advantageous coupling agent. The obtained polymeric were characterized by high rigidity and hardness, nice surface appearance and good mech. properties for selected applications (flower pots, buckets, fence elements, and other profiles).

ST PVC wastepaper fiber filler compn property

IT Soybean oil

RL: MOA (Modifier or additive use); USES (Uses)

(epoxidized, Ergoplast ES; prepn. and properties of PVC compns. filled with wastepaper fiber filler)

IT Solid wastes

(newsprint; prepn. and properties of PVC compns. filled with wastepaper fiber filler)

IT Sorption

(of water; prepn. and properties of PVC compns. filled with wastepaper

fiber filler)

IT Biodegradable materials
Coupling agents
Heat stabilizers
Mechanical properties
Molding of plastics and rubbers
Plasticizers
(prepn. and properties of PVC compns. filled with wastepaper fiber filler)

IT Polyoxyalkylenes, uses
Waxes
RL: MOA (Modifier or additive use); USES (Uses)
(prepn. and properties of PVC compns. filled with wastepaper fiber filler)

IT Newsprint
(waste; prepn. and properties of PVC compns. filled with wastepaper fiber filler)

IT Recycling
(wastepaper; prepn. and properties of PVC compns. filled with wastepaper fiber filler)

IT 9002-86-2P, Polanvil S 61
RL: POF (Polymer in formulation); PRP (Properties); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
(Polanvil S 61; prepn. and properties of PVC compns. filled with wastepaper fiber filler)

IT 13822-56-5, Silquest A 1110
RL: MOA (Modifier or additive use); USES (Uses)
(coupling agent; prepn. and properties of PVC compns. filled with wastepaper fiber filler)

IT 117-81-7, Ergoplast FDO 12202-17-4, Tribasic lead sulfate
25322-68-3, Polikol 300 26401-97-8 39301-09-2, Paraloid K 120N
56189-09-4, Dibasic lead stearate 58229-88-2, Ergoterm OTGO
85255-91-0, Ergowax GS 94700-64-8, Irgawax 280
RL: MOA (Modifier or additive use); USES (Uses)
(prepn. and properties of PVC compns. filled with wastepaper fiber filler)

IT 7732-18-5, water, processes
RL: PEP (Physical, engineering or chemical process); PROC (Process)
(sorption; prepn. and properties of PVC compns. filled with wastepaper fiber filler)

IT 9002-88-4, Polyethylene
RL: MOA (Modifier or additive use); USES (Uses)
(wax; prepn. and properties of PVC compns. filled with wastepaper fiber filler)

L27 ANSWER 3 OF 36 CA COPYRIGHT 2003 ACS

AN 133:326960 CA

TI Method for depositing an adhesive pvc layer on an electrode and electrode obtained according to said method

IN Van Der Wal, Peter Douwe

PA Universite De Neuchatel, Switz.

SO PCT Int. Appl., 25 pp.

CODEN: PIXXD2

DT Patent

LA French

IC ICM B05D007-26

ICS C08K005-54; C09D127-06; G01N027-333; G01N027-414

CC 72-2 (Electrochemistry)

Section cross-reference(s): 38, 48, 79

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000062944	A1	20001026	WO 2000-CH205	20000410
	W: CA, JP, US				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,				

PT, SE

FR 2792226 A1 20001020 FR 1999-4926 19990416
FR 2792226 B1 20011005
EP 1181108 A1 20020227 EP 2000-914003 20000410

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, FI

PRAI FR 1999-4926 A 19990416
WO 2000-CH205 W 20000410

AB The invention relates to a method for depositing an adhesive PVC copolymer layer on a substrate, characterized in that it comprises the following steps: formation of a mixt. of copolymer precursors in an org. solvent, whereby said mixt. comprises PVC and 0.1 - 2 wt. % organotrialkoxysilane of formula $H(HN - R_1)_x - R_2 - Si - (OR_3)_3$, wherein R_1 and R_2 are alkyl groups or intermediate arom. groups, R_3 is an aryl group, the three substituents R_3 cannot be the same and x is 0 - 2; a layer of said mixt. is deposited on the substrate; the mixt. is dried in order to evap. the solvent; the aggregate thus obtained is heated to a temp. of 70 -170 >C for a duration that resp. ranges from 3 h and 5 min.

ST deposition adhesive aminoalkylalkoxysilane PVC copolymer layer ion selective electrode

IT Silanes

RL: NUU (Other use, unclassified); PEP (Physical, engineering or chemical process); RCT (Reactant); PROC (Process); RACT (Reactant or reagent); USES (Uses)

(depositing layer of adhesive PVC copolymer with)

IT Plasticizers

(depositing layer of adhesive PVC copolymer with aminoalkylsiloxane from mixt. contg.)

IT Ion-selective electrodes

(manuf. of alkoxysilane modified PVC for adhesives for)

IT Adhesives

(moisture-curable; manuf. of alkoxysilane modified PVC for adhesives for electrode)

IT Heating

(of precursor contg. soln. adsorbed on substrate in manuf. of adhesive layer of alkoxysilane modified PVC on ion selective electrode)

IT Solvents

(org.; depositing layer of adhesive PVC copolymer with aminoalkylsiloxane from mixt. contg.)

IT 9002-86-2, PVC

RL: NUU (Other use, unclassified); PEP (Physical, engineering or chemical process); RCT (Reactant); PROC (Process); RACT (Reactant or reagent); USES (Uses)

(depositing adhesive PVC layer on electrode)

IT 919-30-2, 3-Aminopropyltriethoxy silane 13822-56-5,
3-Aminopropyltrimethoxy silane 35141-30-1

RL: PEP (Physical, engineering or chemical process); RCT (Reactant); PROC (Process); RACT (Reactant or reagent)

(depositing layer of adhesive PVC copolymer with)

IT 780-69-8, Phenyltriethoxysilane

RL: PEP (Physical, engineering or chemical process); RCT (Reactant); PROC (Process); RACT (Reactant or reagent)

(depositing layer of adhesive PVC copolymer with aminoalkylsilane and)

IT 78-42-2, Tris(2-ethylhexyl)phosphate 84-74-2, Dibutylphthalate
117-81-7, Bis(2-ethylhexyl)phthalate 122-62-3,

Bis(2-ethylhexyl)sebacate 1754-47-8, Dioctyl phenyl phosphonate

3319-31-1, Tris(2-ethylhexyl)trimellitate 37682-29-4, 2-Nitrophenyl

octyl ether 103225-03-2, Tetraundecylbenzophenone-3,3',4,4'-

tetracarboxylate 185612-55-9, Pentadecane-6-butyl

RL: MOA (Modifier or additive use); PEP (Physical, engineering or chemical process); PROC (Process); USES (Uses)

(depositing layer of adhesive PVC copolymer with aminoalkylsiloxane from mixt. contg. plasticizer)

IT 108-94-1, Cyclohexanone, uses

RL: NUU (Other use, unclassified); PEP (Physical, engineering or chemical

process); PROC (Process); USES (Uses)
(depositing layer of adhesive PVC copolymer with aminoalkylsiloxane
from precursor soln. in)

RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE

- (1) Anon; PATENT ABSTRACTS OF JAPAN 1986, V010(298), PP-505
- (2) Basf Ag; EP 0045396 A 1982 CA
- (3) Bostik Ltd; GB 1113635 A 1968
- (4) Dow Corning; FR 2438076 A 1980 CA
- (5) Dow Corning Ltd; DE 2432006 A 1975 CA
- (6) Fiaz, M; ADVANCES IN POLYMER TECHNOLOGY V17(1), P37 CA
- (7) Nok Corp; JP 61114156 A 1986 CA
- (8) Union Carbide Corp; DE 1494534 A 1969

L27 ANSWER 4 OF 36 CA COPYRIGHT 2003 ACS

AN 133:223944 CA

TI EVA-type adhesive interlayer films and laminated safety glasses thereof

IN Morita, Hiroshi; Okaya, Susumu

PA Takeda Chemical Industries, Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 5 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM C03C027-12

ICS C08L031-04; C08L093-04

CC 38-3 (Plastics Fabrication and Uses)

Section cross-reference(s): 57

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2000247690	A2	20000912	JP 1999-48100	19990225
PRAI	JP 1999-48100		19990225		

AB The glasses have the interlayer films contg. partially-sapond. (and acid-modified) ethylene-vinyl acetate copolymer (EVA) 100, rosins 2-20, plasticizers 0.5-10, and silane coupling agents 0.05-3 parts. The interlayer films have good adhesion, transparency, and plasticizer resistance. Thus, a film contg. Dumilan C 1550 (carboxyl-modified sapond. EVA) 100, hydrogenated rosin pentaerythritol ester 2, and DOP 0.5 part was sandwiched between 2 pieces of glasses and heated at .apprx.100.degree. to give a laminated glass with light transmittance 88.3%, haze 0.5%, and no delamination after 4 wk in contact with a DOP-contg. PVC glazing gasket nor DOP application at 50.degree., resp.

ST sapond ethylene vinyl acetate copolymer adhesive film; acid modified sapond EVA adhesive film; carboxy modified sapond EVA adhesive film; laminated glass EVA adhesive interlayer film; safety glass EVA adhesive interlayer film; rosin EVA adhesive film safety glass; plasticizer EVA adhesive film safety glass

IT Adhesive films

(EVA-type adhesive interlayer films for laminated safety glasses)

IT Rosin

RL: MOA (Modifier or additive use); USES (Uses)

(hydrogenated, pentaerythritol esters; EVA-type adhesive interlayer films for laminated safety glasses)

IT Safety glass

Safety glass

RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)

(laminated safety glass; EVA-type adhesive interlayer films for laminated safety glasses)

IT Laminated glass

Laminated glass

RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)

(safety glass; EVA-type adhesive interlayer films for laminated safety glasses)

IT 115-77-5D, Pentaerythritol, hydrogenated rosin ester
 RL: MOA (Modifier or additive use); USES (Uses)
 (EVA-type adhesive interlayer films for laminated safety glasses)

IT 71950-36-2, Dumilan C 1550
 RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
 (EVA-type adhesive interlayer films for laminated safety glasses)

IT 2530-83-8, (.gamma.-Glycidoxypropyl)trimethoxysilane
 RL: MOA (Modifier or additive use); USES (Uses)
 (coupling agents; EVA-type adhesive interlayer films for laminated safety glasses)

IT 117-81-7, DOP
 RL: MOA (Modifier or additive use); USES (Uses)
 (plasticizer; EVA-type adhesive interlayer films for laminated safety glasses)

L27 ANSWER 5 OF 36 CA COPYRIGHT 2003 ACS

AN 132:251947 CA

TI Room temperature-curable composition of hydrolyzable silyl group-containing polyoxyalkylenes

IN Doi, Takao; Watanabe, Takashi; Onoguchi, Tatsuo; Hayashi, Tomomi

PA Asahi Glass Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 17 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM C08L071-02

ICS C08G065-336; C08K005-17; C08K005-57; C08L083-04; C08L101-10; C08F008-42

CC 37-6 (Plastics Manufacture and Processing)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2000109677	A2	20000418	JP 1998-287009	19981008
PRAI	JP 1998-287009		19981008		

AB Title compn. comprises a polymer contg. hydrolyzable silyl group SiXaR13-a (R1 = C1-20 org. group; X = OH, hydrolyzable group; a = 1, 2, 3) and a tin compd, as curing catalyst, selected from (1) reaction products of dialkyltin oxides and R2[CO2R3]n (R2 = C1-20 hydrocarbon group; R3 = C1-20 hydrocarbyl; n = 1-6), (2) reaction products of dialkyltin oxides and silicic acid esters, (3) reaction products of dialkyltin oxides with carboxylic acids and alcs., (4) reaction products of hydrolyzable silyl-contg. compds. and the tin compds. stated in (1) and (3).

ST polyoxyalkylene alkoxysilyl terminated room temp curable; dialkyltin oxide reaction product curing catalyst

IT Polyoxyalkylenes, preparation

RL: IMF (Industrial manufacture); POF (Polymer in formulation); RCT (Reactant); TEM (Technical or engineered material use); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(reaction products; room temp.-curable compn. of hydrolyzable silyl group-contg. polyoxyalkylenes)

IT Crosslinking catalysts

(room temp.-curable compn. of hydrolyzable silyl group-contg. polyoxyalkylenes)

IT Polyoxyalkylenes, preparation

RL: IMF (Industrial manufacture); POF (Polymer in formulation); RCT (Reactant); TEM (Technical or engineered material use); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(room temp.-curable compn. of hydrolyzable silyl group-contg. polyoxyalkylenes)

IT 19412-90-9

RL: CAT (Catalyst use); USES (Uses)

(prepn. of room temp.-curable compn. of hydrolyzable silyl group-contg. polyoxyalkylenes)

IT 10294-34-5, Boron trichloride

RL: CAT (Catalyst use); USES (Uses)
 (prepn. room temp.-curable compn. of hydrolyzable silyl group-contg. polyoxyalkylenes)

IT 75-54-7 149-73-5, Methyl orthoformate 7374-80-3, 1,4-Bis(1-chloro-1-methylethyl)benzene 10025-78-2
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (prepn. room temp.-curable compn. of hydrolyzable silyl group-contg. polyoxyalkylenes)

IT 78-10-4D, Tetraethyl silicate, reaction products with dialkyltin oxides
 RL: CAT (Catalyst use); USES (Uses)
 (room temp.-curable compn. of hydrolyzable silyl group-contg. polyoxyalkylenes)

IT 117-81-7DP, Bis(2-ethylhexyl) phthalate, reaction products with dialkyltin oxides 818-08-6DP, Dibutyltin oxide, reaction products 2983-37-1DP, Ethyl 2-ethylhexanoate, reaction products with dialkyltin oxides
 RL: CAT (Catalyst use); IMF (Industrial manufacture); PREP (Preparation); USES (Uses)
 (room temp.-curable compn. of hydrolyzable silyl group-contg. polyoxyalkylenes)

IT 25322-69-4DP, Polypropylene glycol, reaction products 25791-96-2DP, Polypropylene glycol glycerol ether, reaction products 52625-13-5DP, Sorbitol-propylene oxide adduct, reaction products
 RL: IMF (Industrial manufacture); POF (Polymer in formulation); RCT (Reactant); TEM (Technical or engineered material use); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
 (room temp.-curable compn. of hydrolyzable silyl group-contg. polyoxyalkylenes)

IT 998-30-1DP, Triethoxysilane, reaction products with allyl-terminated polyoxyalkylenes 2031-62-1DP, Diethoxymethylsilane, reaction products with allyl-terminated polyoxyalkylenes 4420-74-0DP, 3-Mercaptopropyltrimethoxysilane, reaction products with allyl-terminated polyoxyalkylenes 9003-17-2DP, Polybutadiene, hydroxy-terminated, reaction products with 3-isocyanatopropyltrimethoxysilane 9003-27-4DP, Isobutylene homopolymer, trimethoxysilyl-terminated 9003-54-7P, Acrylonitrile-styrene copolymer 15396-00-6DP, 3-Isocyanatopropyltrimethoxysilane, reaction products with polyoxyalkylenes 16881-77-9DP, Dimethoxymethylsilane, reaction products with allyl-terminated polyoxyalkylenes 88507-04-4DP, Polytail HA, reaction products with 3-isocyanatopropyltrimethoxysilane 263013-30-5P 263013-31-6P
 RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (room temp.-curable compn. of hydrolyzable silyl group-contg. polyoxyalkylenes)

IT 107-05-1DP, Allyl chloride, reaction products polyoxyalkylenes 2487-90-3DP, Trimethoxysilane, reaction products with allyl-terminated polyoxyalkylenes
 RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
 (room temp.-curable compn. of hydrolyzable silyl group-contg. polyoxyalkylenes)

L27 ANSWER 6 OF 36 CA COPYRIGHT 2003 ACS

AN 128:181385 CA

TI Cyanoacrylate adhesive compositions for bonding glass, and their use

IN McDonnell, Patrick Francis; Lambert, Robert Joseph; Scott, Edward; Wren, Gerard; McGuinness, Marie

PA Loctite(Ireland)limited, Ire.

SO PCT Int. Appl., 32 pp.

CODEN: PIXXD2

DT Patent

LA English

IC C09J004-04

CC 38-3 (Plastics Fabrication and Uses)

Section cross-reference(s) : 57

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9807802	A1	19980226	WO 1997-IE60	19970815
	W: AU, BR, CA, JP, KR, US				
	RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	AU 9738617	A1	19980306	AU 1997-38617	19970815
	AU 740789	B2	20011115		
	EP 918832	A1	19990602	EP 1997-935733	19970815
	EP 918832	B1	20030102		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	BR 9711198	A	19990817	BR 1997-11198	19970815
	JP 2001505235	T2	20010417	JP 1998-510551	19970815
	AT 230429	E	20030115	AT 1997-935733	19970815
PRAI	IE 1996-591	A	19960816		
	WO 1997-IE60	W	19970815		
AB	A one-part adhesive compn. for bonding glass including: (a) a cyanoacrylate monomer (esp. Bu cyanoacrylate); (b) 15-60% of at least one plasticizer; and (c) 0.01-5.0% of at least one silane. The silane may be selected from the silanes R'(4-n)Si(OR'')n (n = 1-4; R', R'' = H, hydrocarbyl, aryl, hydrocarbylaryl or a substituted deriv. thereof) or R1R2R3R4Si (R1, R2, R3, R4 = hydrocarbyl, aryl, hydrocarbylaryl, or a substituted deriv. thereof, H, halogen, OR5 wherein R5 represents hydrocarbyl, aryl or hydrocarbylaryl or a substituted deriv. thereof; any two of the groups R1-R4 may be taken together with the silicon atom to form a cycle; with the proviso that at least one of R1-R4 represents hydrocarbyl, aryl, hydrocarbylaryl or a substituted deriv. thereof). The adhesives are more resistant to debonding because of changes in temp. or environment, such as the conditions encountered in a dishwasher. A typical Bu cyanoacrylate-based formulation contained 30% di-Bu phthalate and 0.2% glycidyloxypropyltrimethoxysilane.				
ST	cyanoacrylate glass adhesive contg plasticizer silane				
IT	Glass, miscellaneous				
	RL: MSC (Miscellaneous)				
	(cyanoacrylate adhesive compns. contg. plasticizer and silane for)				
IT	Plasticizers				
	(glass-bonding cyanoacrylate adhesive compns. contg. silanes and)				
IT	Adhesives				
	(one-component; glass-bonding cyanoacrylate adhesive compns. contg. plasticizer and silane)				
IT	Coupling agents				
	(organosilane; glass-bonding cyanoacrylate adhesive compns. contg. plasticizer and)				
IT	Silanes				
	RL: MOA (Modifier or additive use); USES (Uses)				
	(organosilanes, coupling agents; glass-bonding cyanoacrylate adhesive compns. contg. plasticizer and silane)				
IT	78-07-9, Ethyltriethoxysilane	78-08-0, Vinyltriethoxysilane	2182-66-3, Diacetoxymethylsilane	2530-83-8	2530-85-0, 3-(Methacryloyloxy)propyltrimethoxysilane
	2768-02-7, Vinyltrimethoxysilane	2944-70-9, Diacetoxymethylvinylsilane	4130-08-9, Vinyltriacetoxysilane	4253-34-3, Methyltriacetoxysilane	17865-07-5, Propyltriacetoxysilane
	RL: MOA (Modifier or additive use); USES (Uses)				
	(coupling agent; glass-bonding cyanoacrylate adhesive compns. contg. plasticizer and silane)				
IT	6606-65-1, Butyl cyanoacrylate	25154-80-7, Butyl cyanoacrylate	homopolymer		
	RL: TEM (Technical or engineered material use); USES (Uses)				
	(glass-bonding cyanoacrylate adhesive compns. contg. plasticizer and silane)				
IT	77-94-1, Butyl citrate	84-74-2, Dibutyl phthalate	85-68-7, Benzyl butyl phthalate	109-43-3, Dibutyl sebacate	110-40-7, Diethyl sebacate

117-81-7, Diisooctyl phthalate 120-55-8, Diethylene glycol
dibenzoate 1330-78-5, Tritolyl phosphate 3648-21-3, Diheptyl phthalate
41451-28-9, Diisoheptyl phthalate
RL: MOA (Modifier or additive use); USES (Uses)
(plasticizer; glass-bonding cyanoacrylate adhesive compns. contg.
plasticizer and silane)

L27 ANSWER 7 OF 36 CA COPYRIGHT 2003 ACS

AN 126:264728 CA

TI Interfacial enhancement of flexible PVC-silica composites by silane
coupling agents

AU Ulutan, Sevgi; Balkose, Devrim

CS Dep. Chem. Eng., Ege Univ., Bornova-Izmir, 35100, Turk.

SO Composite Interfaces (1997), 4(4), 223-237

CODEN: CMNTEU

PB VSP

DT Journal

LA English

CC 37-5 (Plastics Manufacture and Processing)

AB Enhancement of a flexible PVC-silica composite interface was studied by
the application of .gamma.-aminopropyltrimethoxysilane on silica.
Composites contg. silica and silanized silica up to 25.6 phr (per hundred
resin) and prepd. by sol-gel technol. were subjected to water and
water-vapor attacks similar to those in their daily use. Silane
application resulted in diminishing liq.-water and water-vapor sorption by
about 24.0% and 11.9%, resp. Equil. wt. gain values of the composites
having different amts. of silica correlated well with a peak at 3400 cm⁻¹
in the IR spectra, which was attributed to the stretching vibration of the
O-H group of water. Liq.-water and water-vapor diffusivities in
composites detd. by the evaluation of wt. gain against time data were
about 0.4 .times. 10⁻¹³ and 0.4 .times. 1-12 m²s⁻¹, resp. Inhibition of
dioctyl phthalate (DOP) migration from composites by silane application
was also detd. as 24% using UV measurements. The most impressive merit of
silane enhancement was obsd. as the retention of ultimate tensile strength
(UTS) under wet conditions. While the untreated silica composite reduced
its UTS by about 21.2%, silanized silica composite reduced its UTS by only
about 13.6%, on wetting.

ST PVC silica coupling agent strength; aminopropyltrimethoxysilane coupling
agent silica PVC

IT Coupling agents

Diffusion

Humidity

Permeation

Sorption

(interfacial enhancement of flexible PVC-silica composites by silane
coupling agents)

IT 13822-56-5, .gamma.-Aminopropyltrimethoxysilane

RL: MOA (Modifier or additive use); NUU (Other use, unclassified); PRP
(Properties); USES (Uses)

(coupling agent; interfacial enhancement of flexible PVC-silica
composites by silane coupling agents)

IT 7631-86-9, Silica, properties

RL: MOA (Modifier or additive use); PRP (Properties); USES (Uses)

(interfacial enhancement of flexible PVC-silica composites by silane
coupling agents)

IT 7732-18-5, Water, miscellaneous

RL: MSC (Miscellaneous)

(interfacial enhancement of flexible PVC-silica composites by silane
coupling agents)

IT 9002-86-2, PVC

RL: PRP (Properties)

(interfacial enhancement of flexible PVC-silica composites by silane
coupling agents)

IT 117-81-7, Dioctyl phthalate

RL: MOA (Modifier or additive use); NUU (Other use, unclassified); PRP

(Properties); USES (Uses)

(plasticizer; interfacial enhancement of flexible PVC-silica composites by silane coupling agents)

L27 ANSWER 8 OF 36 CA COPYRIGHT 2003 ACS

AN 125:331080 CA

TI Manufacture of one liquid-type urethane adhesives with improved storage stability

IN Kishi, Masao; Fuseya, Yoshiro; Tsuchida, Tomio; Nagata, Katsura; Suewaka, Kosuke

PA Mitsui Toatsu Chemicals, Japan

SO Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM C09J175-04

CC 38-3 (Plastics Fabrication and Uses)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 08218054	A2	19960827	JP 1995-21767	19950209
PRAI	JP 1995-21767		19950209		

AB The adhesives with improved hot water resistance are manufd. by (1) blending (a) active NCO-contg. urethane prepolymers obtained by reacting polyols and excess polyisocyanates, (b) fillers with water content <0.2%, and (c) thixotropic agents with water content <2.0% in closed reactors with stirrers to react the water in the thixotropic agents and the fillers, (2) adding (d) aminosilane coupling agents to react with the prepolymers, and (3) blending and defoaming (e) plasticizers, (f) curing accelerators, and (g) glycidylsilane coupling agents. Thus, Cosmonate PH-B (MDI) 300, Diol 3000 (polyoxypropylene diol) 350, and Tiol 5000 (polypropylene triol) 350 parts were reacted at 85.degree., then obtained the prepolymer was blended and reacted with 150.0 parts NSK 1 (CaCO₃) and 8.0 parts Aerosil 200 at 85.degree., 1.0 part A 1110 was added to the system and reacted at 40.degree., then DOP 45.0, Neostann U 100 0.1, and KBM 403 1.0 part were added to the system and defoamed to give an adhesive with viscosity at 25.degree. 420 P.

ST polyurethane adhesive storage stability building material; tile
polyurethane adhesive water resistance; aminosilane coupling agent
polyurethane adhesive tile; glycidylsilane coupling agent polyurethane
adhesive tile; calcium carbonate filler polyurethane adhesive tile; silica
thixotropic agent polyurethane adhesive

IT Tiles

(one liq.-type urethane adhesives with good storage stability and water
resistance for bonding tiles)

IT Silanes

RL: MOA (Modifier or additive use); USES (Uses)

(one liq.-type urethane adhesives with good storage stability and water
resistance for bonding tiles)

IT Coupling agents

RL: MOA (Modifier or additive use); USES (Uses)

(silanes; one liq.-type urethane adhesives with good storage stability
and water resistance for bonding tiles)

IT Water-resistant materials

(adhesives, storage-stable, one liq.-type urethane adhesives for
bonding tiles)

IT Urethane polymers, uses

RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP

(Properties); TEM (Technical or engineered material use); PREP

(Preparation); USES (Uses)

(polyoxyalkylene-, one liq.-type urethane adhesives with good storage
stability and water resistance for bonding tiles)

IT Adhesives

(storage-stable, water-resistant, one liq.-type urethane adhesives for
bonding tiles)

IT 471-34-1, Calcium carbonate, uses
 RL: MOA (Modifier or additive use); USES (Uses)
 (NSK 1; one liq.-type urethane adhesives with good storage stability and water resistance for bonding tiles)

IT 51447-37-1P, Diol 3000-MDI-Triol 5000 copolymer 183329-17-1P
 RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (one liq.-type urethane adhesives with good storage stability and water resistance for bonding tiles)

IT 77-58-7, Neostann U 100 103-23-1, DOA 117-81-7, DOP 919-30-2, A 1100 2530-83-8 183146-95-4, Daphne Alpha Cleaner M
 RL: MOA (Modifier or additive use); USES (Uses)
 (one liq.-type urethane adhesives with good storage stability and water resistance for bonding tiles)

IT 7631-86-9, Aerosil 200, uses
 RL: MOA (Modifier or additive use); USES (Uses)
 (thixotropic agents; one liq.-type urethane adhesives with good storage stability and water resistance for bonding tiles)

L27 ANSWER 9 OF 36 CA COPYRIGHT 2003 ACS

AN 125:302852 CA

TI One liquid-type urethane adhesives with good storage stability and hot water resistance for bonding tiles

IN Kishi, Masao; Fuseya, Yoshiro; Tsuchida, Tomio; Nagata, Katsura; Suewaka, Kosuke

PA Mitsui Toatsu Chemicals, Japan

SO Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM C09J175-04

CC 38-3 (Plastics Fabrication and Uses)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 08218053	A2	19960827	JP 1995-21766	19950209
PRAI	JP 1995-21766		19950209		

AB The adhesives comprise (a) active NCO-contg. urethane prepolymers obtained by reacting polyols and excess polyisocyanates, (b) fillers with water content <0.1%, (c) thixotropic agents with water content <0.1%, (d) plasticizers, (e) curing accelerators, and (f) aminosilane coupling agents and glycidylsilane coupling agents. Thus, Diol 3000 28.4, MN 5000 28.4, and Cosmonate PH (MDI) 43.2 parts were reacted at 85.degree., then the prepolymer having NCO was blended with NSK 1 (CaCO₃) 150.0, DOP 40.0, Aerosil 200 12.0, A 1110 0.05, KBM 403 0.05, and Neostann U 100 0.1 part successively and defoamed to give an adhesive with viscosity at 25.degree. 350-400 P and thixotropy (1 rpm/10 rpm viscosity ratio) 5-10. The adhesive was kept at 50.degree. for 2 wk to show good storage stability.

ST polyurethane adhesive storage stability building material; tile
 polyurethane adhesive water resistance; aminosilane coupling agent
 polyurethane adhesive; glycidylsilane coupling agent polyurethane adhesive
 IT Tiles

(one liq.-type urethane adhesives with good storage stability and hot water resistance for bonding tiles)

IT Silanes

RL: MOA (Modifier or additive use); USES (Uses)

(one liq.-type urethane adhesives with good storage stability and hot water resistance for bonding tiles)

IT Coupling agents

RL: MOA (Modifier or additive use); USES (Uses)

(silanes; one liq.-type urethane adhesives with good storage stability and hot water resistance for bonding tiles)

IT Water-resistant materials

(adhesives, storage-stable, one liq.-type urethane adhesives for

bonding tiles)

IT Urethane polymers, uses
 RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (polyoxyalkylene-, one liq.-type urethane adhesives with good storage stability and hot water resistance for bonding tiles)

IT Adhesives
 (storage-stable, water-resistant, one liq.-type urethane adhesives for bonding tiles)

IT 471-34-1, Calcium carbonate, uses
 RL: MOA (Modifier or additive use); USES (Uses)
 (NSK 1; one liq.-type urethane adhesives with good storage stability and hot water resistance for bonding tiles)

IT 51447-37-1P 170633-24-6P
 RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (one liq.-type urethane adhesives with good storage stability and hot water resistance for bonding tiles)

IT 77-58-7, Neostann U 100 103-23-1, DOA 117-81-7, DOP 919-30-2, A 1100 2530-83-8 7631-86-9, Aerosil 200, uses 183146-95-4, Daphne Alpha Cleaner M
 RL: MOA (Modifier or additive use); USES (Uses)
 (one liq.-type urethane adhesives with good storage stability and hot water resistance for bonding tiles)

L27 ANSWER 10 OF 36 CA COPYRIGHT 2003 ACS

AN 124:178472 CA

TI Electrically conducting pastes for good adhesion strength

IN Kodera, Yoshiaki

PA Sekisui Fine Chemical Co Ltd, Japan

SO Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM C09D005-24

ICS H01B001-00; H01B001-24; H05K001-09

CC 38-3 (Plastics Fabrication and Uses)

Section cross-reference(s): 76

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 07316474	A2	19951205	JP 1994-108216	19940523
PRAI	JP 1994-108216		19940523		
AB	Title pastes comprise poly(vinyl butyrals) 100, halo-free plasticizers 12-75, halo-free solvents 300-880, and fibrous elec. conducting materials 30-250 parts. The pastes are useful for manuf. of printed circuit boards. Thus, S-Lec BM 2 100, triethylene glycol di-2-ethylbutyrate 15, 1:1 mixt. of EtOH and C6H5Me 600, and Dentall BK (potassium titanate whisker) 150 parts were mixed and applied on a glass sheet to give a film showing good adhesion.				
ST	elec conducting paste polyvinyl butyral; halogen free elec conducting paste; potassium titanate fiber elec conducting paste				
IT	Silanes RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses) (coupling agents; elec. conducting pastes contg. poly(vinyl butyral), halo-free plasticizers, and fibrous elec. conductors for good adhesion)				
IT	Coupling agents Plasticizers (elec. conducting pastes contg. poly(vinyl butyral), halo-free plasticizers, and fibrous elec. conductors for good adhesion)				
IT	Vinyl acetal polymers RL: POF (Polymer in formulation); TEM (Technical or engineered material				

use); USES (Uses)
 (butyrals, elec. conducting pastes contg. poly(vinyl butyral),
 halo-free plasticizers, and fibrous elec. conductors for good adhesion)

IT Electric conductors
 (pastes, elec. conducting pastes contg. poly(vinyl butyral), halo-free
 plasticizers, and fibrous elec. conductors for good adhesion)

IT Synthetic fibers
 RL: TEM (Technical or engineered material use); USES (Uses)
 (potassium titanate, Dentall BK whiskers; elec. conducting pastes
 contg. poly(vinyl butyral), halo-free plasticizers, and fibrous elec.
 conductors for good adhesion)

IT 2530-83-8, TSL 8350
 RL: MOA (Modifier or additive use); TEM (Technical or engineered material
 use); USES (Uses)
 (coupling agents; elec. conducting pastes contg. poly(vinyl butyral),
 halo-free plasticizers, and fibrous elec. conductors for good adhesion)

IT 142-72-3, Magnesium acetate
 RL: TEM (Technical or engineered material use); USES (Uses)
 (elec. conducting pastes contg. poly(vinyl butyral), halo-free
 plasticizers, and fibrous elec. conductors for good adhesion)

IT 95-08-9, Triethylene glycol di-2-ethylbutyrate 117-81-7, Dioctyl
 phthalate
 RL: TEM (Technical or engineered material use); USES (Uses)
 (plasticizers; elec. conducting pastes contg. poly(vinyl butyral),
 halo-free plasticizers, and fibrous elec. conductors for good adhesion)

IT 64-17-5, Ethanol, uses 67-63-0, Isopropanol, uses 108-88-3, Toluene,
 uses 29063-28-3, Octanol
 RL: NUU (Other use, unclassified); USES (Uses)
 (solvents; elec. conducting pastes contg. poly(vinyl butyral),
 halo-free plasticizers, and fibrous elec. conductors for good adhesion)

IT 12673-69-7, Potassium titanate
 RL: TEM (Technical or engineered material use); USES (Uses)
 (whiskers; elec. conducting pastes contg. poly(vinyl butyral),
 halo-free plasticizers, and fibrous elec. conductors for good adhesion)

L27 ANSWER 11 OF 36 CA COPYRIGHT 2003 ACS

AN 124:119058 CA

TI Chemically treated glass-type substrates with vinyl polymer compatibility

IN Girgis, Mikhail M.

PA PPG Industries, Inc., USA

SO U.S., 8 pp. Cont. of U.S. Ser. No. 934,093, abandoned.

CODEN: USXXAM

DT Patent

LA English

IC ICM B32B009-00

NCL 428391000

CC 37-6 (Plastics Manufacture and Processing)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5466528	A	19951114	US 1994-324432	19941017
	EP 665906	A1	19950809	EP 1993-920009	19930813
	EP 665906	B1	19981014		
	R: BE, DE, FR, GB, IT				
	AU 672822	B2	19961017	AU 1993-50083	19930813
PRAI	US 1992-934093	B1	19920821		
	WO 1993-US7596	W	19930813		

AB Glycérider-free aq. sizes for improving the compatibility of glass fibers
 with vinyl polymers contain .gtoreq.1 starch, .gtoreq.47% (based on
 solids) .gtoreq.1 wax, 3-20% (based on solids) cationic lubricant, 3-20%
 (based on solids) .gtoreq.1 organofunctional silane coupling agent,
 .ltoreq.20% (based on solids) adhesion promoter such as esters and(or)
 anhydrides of carboxylic acids, .ltoreq.20% emulsifier for the adhesion
 promoter, and .gtoreq.1 of 1-15% (based on solids) film-forming polymer
 other than starch and 1-20% (based on solids) polyamine-fatty acid

condensate. In these sizes, the amt. of wax is always greater than the amt. of each individual nonaq. component other than starch whereas with starch, it can be in a ratio of slightly less than 1 to 1. A typical aq. sizing agent contained Amaizo 213 17, Michemlube 296 wax 50, Emery 6717 cationic lubricant 15, fatty acid polyamine condensate 8.6, poly(vinylpyrrolidone) film-former 7, and organofunctional silane 2.4%.

ST starch sizing agent glass fiber; emulsifier sizing agent glass fiber; anhydride carboxylic sizing agent glass fiber; carboxylate ester sizing agent glass fiber; polyvinylpyrrolidone sizing agent glass fiber; glyceride free sizing agent glass fiber; polyamine amide sizing agent glass fiber; fatty amide sizing agent glass fiber; silane coupler sizing agent glass fiber; wax sizing agent glass fiber; vinyl polymer glass fiber compatibilizing agent

IT Anhydrides
 RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
 (adhesion promoters; sizing agents for glass fibers with good compatibility with vinyl polymers)

IT Silanes
 RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
 (coupling agents; sizing agents for glass fibers with good compatibility with vinyl polymers)

IT Coupling agents
 (silanes; sizing agents for glass fibers with good compatibility with vinyl polymers)

IT Sizes
 (sizing agents for glass fibers with good compatibility with vinyl polymers)

IT Glass fibers, miscellaneous
 RL: MSC (Miscellaneous)
 (sizing agents for glass fibers with good compatibility with vinyl polymers)

IT Lubricants
 (cationic, sizing agents for glass fibers with good compatibility with vinyl polymers)

IT Carboxylic acids, uses
 RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
 (esters, adhesion promoters; sizing agents for glass fibers with good compatibility with vinyl polymers)

IT Amides, uses
 RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
 (fatty, with polyamines, cationic lubricant; sizing agents for glass fibers with good compatibility with vinyl polymers)

IT Paraffin waxes and Hydrocarbon waxes, uses
 RL: TEM (Technical or engineered material use); USES (Uses)
 (microcryst., oxidized, Michemlube 296; sizing agents for glass fibers with good compatibility with vinyl polymers)

IT Amines, uses
 RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
 (poly-, fatty amides, cationic lubricant; sizing agents for glass fibers with good compatibility with vinyl polymers)

IT 117-81-7, Di-2-ethylhexyl phthalate 117-84-0, Dioctyl phthalate 528-44-9D, Trimellitic acid, mixed esters with hexanol and octanol and decanol 25917-35-5D, Hexanol, mixed esters with trimellitic acid and octanol and decanol 26761-40-0, Diisodecyl phthalate 29063-28-3D, Octanol, mixed esters with trimellitic acid and hexanol and decanol 89493-40-3, PX-336
 RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
 (adhesion promoter; sizing agents for glass fibers with good compatibility with vinyl polymers)

IT 57-11-4D, Octadecanoic acid, reaction products with tetraethylenepentamine and acetic acid 64-19-7D, Acetic acid, reaction products with stearic acid and tetraethylenepentamine 112-57-2D, Tetraethylenepentamine, reaction products with stearic acid and acetic acid 504-75-6D, Imidazoline, alkyl derivs. 58799-02-3, Cation X 67185-58-4, Emery 6717
 RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
 (cationic lubricant; sizing agents for glass fibers with good compatibility with vinyl polymers)

IT 9005-64-5, Polyethylene glycol sorbitan monolaurate 52624-57-4, Pluracol V-10
 RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
 (emulsifier for adhesion promoter; sizing agents for glass fibers with good compatibility with vinyl polymers)

IT 2530-83-8 2530-85-0 36729-58-5D, Decanol, mixed esters with trimellitic acid and octanol and decanol
 RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
 (sizing agents for glass fibers with good compatibility with vinyl polymers)

IT 9002-86-2, PVC
 RL: POF (Polymer in formulation); USES (Uses)
 (sizing agents for glass fibers with good compatibility with vinyl polymers)

IT 9003-39-8, Poly(vinylpyrrolidone) 9005-25-8, Amaizo 213, uses 62628-82-4, Kollotex 173299-09-7, R 6990
 RL: TEM (Technical or engineered material use); USES (Uses)
 (sizing agents for glass fibers with good compatibility with vinyl polymers)

L27 ANSWER 12 OF 36 CA COPYRIGHT 2003 ACS

AN 122:163023 CA

TI One-component moisture-hardenable urethane adhesives

IN Kishi, Masao; Sano, Seiichi; Nagata, Katsura

PA Mitsui Toatsu Chemicals, Japan

SO Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM C09J175-04

CC 38-3 (Plastics Fabrication and Uses)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 06240228	A2	19940830	JP 1993-30080	19930219
PRAI	JP 1993-30080		19930219		

AB The title adhesives with good storage stability and high thixotropy, useful for adhesion of unit bath tiles, contain NCO-terminated urethane prepolymers prepd. from polyols having .gtoreq.2 OH groups and excess polyisocyanates, fillers, plasticizers, curing accelerators, and silane coupling agents. Thus, Diol 3000 275, MN 5000 15, NS 100 (CaCO₃) 350, Cosmonate LK (carbodiimide-modified MDI) 25, and Cosmonate PH (4,4'-diphenylmethane diisocyanate, 99.5% purity) 230 parts were heated at 90.degree. for 3 h to give a prepolymer, which was mixed with Aerosil 200 12, dioctyl phthalate 90, dibutyltin dilaurate 0.8, and .gamma.-glycidoxypropyltrimethoxysilane 2 parts to give an adhesive showing adhesion strength 7.2 kg/cm² initially and 6.5 kg/cm² after 168 h in H₂O at 23.degree. for a Ca silicate plate and porcelain tiles.

ST moisture hardenable adhesive urethane; storage stability urethane adhesive; polyurethane adhesive bath tile

IT Tiles

(adhesives for; one-component moisture-hardenable urethane adhesives for bath tiles)

IT Adhesives

Crosslinking catalysts

Plasticizers

(one-component moisture-hardenable urethane adhesives for bath tiles)

IT Urethane polymers, uses

RL: TEM (Technical or engineered material use); USES (Uses)

(one-component moisture-hardenable urethane adhesives for bath tiles)

IT Coupling agents

(silane; one-component moisture-hardenable urethane adhesives for bath tiles)

IT 2530-83-8, .gamma.-Glycidoxypropyltrimethoxysilane

RL: TEM (Technical or engineered material use); USES (Uses)

(coupling agent; one-component moisture-hardenable urethane adhesives for bath tiles)

IT 77-58-7, Dibutyltin dilaurate

RL: TEM (Technical or engineered material use); USES (Uses)

(curing accelerators; one-component moisture-hardenable urethane adhesives for bath tiles)

IT 471-34-1, NS 100 (carbonate), uses 7631-86-9, Aerosil 200, uses

RL: TEM (Technical or engineered material use); USES (Uses)

(fillers; one-component moisture-hardenable urethane adhesives for bath tiles)

IT 161520-23-6P 161520-24-7P

RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(one-component moisture-hardenable urethane adhesives for bath tiles)

IT 117-81-7, Dioctyl phthalate

RL: TEM (Technical or engineered material use); USES (Uses)

(plasticizers; one-component moisture-hardenable urethane adhesives for bath tiles)

L27 ANSWER 13 OF 36 CA COPYRIGHT 2003 ACS

AN 122:163022 CA

TI One-component moisture-hardenable urethane adhesives

IN Sano, Seiichi; Kishi, Masao; Nagata, Katsura

PA Mitsui Toatsu Chemicals, Japan

SO Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM C09J175-04

CC 38-3 (Plastics Fabrication and Uses)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 06240227	A2	19940830	JP 1993-30079	19930219
PRAI	JP 1993-30079		19930219		

AB The title adhesives with good storage stability and high thixotropy, useful for adhesion of unit bath tiles, contain NCO-terminated urethane prepolymers prepd. from polyols having .gtoreq.2 OH groups and excess polyisocyanates, fillers, plasticizers, curing accelerators, and silane coupling agents. Thus, Diol 3000 275, MN 5000 15, NS 100 (CaCO₃) 350, Cosmonate M 200 25, and Cosmonate PH (4,4'-diphenylmethane diisocyanate) 230 parts were heated at 90.degree. for 3 h to give a prepolymer, which was mixed with Aerosil 200 12, dioctyl phthalate 90, dibutyltin dilaurate 0.8, and .gamma.-glycidoxypropyltrimethoxysilane 2 parts to give an adhesive showing adhesion strength 7.5 kg/cm² initially and 7.0 kg/cm² after 168 h in H₂O at 23.degree. for a Ca silicate plate and porcelain tiles.

ST moisture hardenable adhesive urethane; storage stability urethane adhesive; polyurethane adhesive bath tile

IT Tiles

(adhesives for; one-component moisture-hardenable urethane adhesives for bath tiles)

IT Adhesives

Crosslinking catalysts

Plasticizers

- (one-component moisture-hardenable urethane adhesives for bath tiles)
- IT Urethane polymers, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(one-component moisture-hardenable urethane adhesives for bath tiles)
- IT Coupling agents
(silane; one-component moisture-hardenable urethane adhesives for bath tiles)
- IT 77-58-7, Dibutyltin dilaurate
RL: TEM (Technical or engineered material use); USES (Uses)
(curing accelerators; one-component moisture-hardenable urethane adhesives for bath tiles)
- IT 471-34-1, NS 100 (carbonate), uses 7631-86-9, Aerosil 200, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(fillers; one-component moisture-hardenable urethane adhesives for bath tiles)
- IT 66410-11-5P 161554-22-9P
RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(one-component moisture-hardenable urethane adhesives for bath tiles)
- IT 2530-83-8
RL: TEM (Technical or engineered material use); USES (Uses)
(one-component moisture-hardenable urethane adhesives for bath tiles)
- IT 117-81-7, Dioctyl phthalate
RL: TEM (Technical or engineered material use); USES (Uses)
(plasticizers; one-component moisture-hardenable urethane adhesives for bath tiles)

L27 ANSWER 14 OF 36 CA COPYRIGHT 2003 ACS

AN 121:182088 CA

TI One-component modified-polysulfide sealing material compositions

IN Maeda, Etsuro; Wakabayashi, Ichitami

PA Nogawa Kemikaru Kk, Japan

SO Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM C09K003-10

CC 42-11 (Coatings, Inks, and Related Products)

Section cross-reference(s): 39

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 06128559	A2	19940510	JP 1992-301611	19921015
PRAI	JP 1992-301611		19921015		

AB Title compns. with good extrusion workability without change in sagging property, useful for filling chinks in building or structural materials, contain 100 parts modified polysulfides, 30-100 parts plasticizers, 50-200 parts inorg. fillers, 3-10 parts antisag agents, 0-2 parts UV absorbents, 0-2 parts adhesion accelerators, 2-10 parts curing catalysts, 0-15 parts colorants, and 1-10 parts titanate coupling agents. Permapol P 965 50, Permapol P 795 (modified polysulfide) 50, dioctyl phthalate 100, CaCO₃ 100, clay 100, silicic anhydride 5, 2-hydroxy-4-methoxybenzophenone 0.8, A 187 0.05, A 1100 0.05, PbO₂ 1.0, porous silica 3.5, titanium white 5.0, carbon black 5.0, and KR 38S 5 parts were kneaded under N to give a sealing compn. showing good extrusion workability without change in sagging property.

ST modified polysulfide sealing material compn; rubber sulfur contg sealing material; plasticizer sealing material compn; inorg filler sealing material compn; antisag agent sealing material compn; UV absorbent sealing material compn; adhesion accelerator sealing material compn; crosslinking catalyst sealing material compn; titanate coupling agent sealing compn

IT Carbon black, uses

RL: USES (Uses)

(colorants, sealing material compns. contg.)

IT Clays, uses
 RL: USES (Uses)
 (fillers, sealing material compns. contg.)

IT Sealing compositions
 (modified polysulfide-plasticizer-inorg. filler-antisag agent-UV
 absorbent-adhesion accelerator-curing catalyst-colorant-titanate
 coupling agent-contg.)

IT Coloring materials
 Crosslinking catalysts
 Plasticizers
 (sealing material compns. contg.)

IT Coupling agents
 (titanates, sealing material compns. contg.)

IT Light stabilizers
 (UV, sealing material compns. contg.)

IT Rubber, synthetic
 RL: USES (Uses)
 (polyether, [[[(mercaptoalkoxy)carbonyl]amino]alkyl]carbamoyl]-
 terminated, sealing compns., plasticizer-inorg. filler-antisag agent-UV
 absorbent-adhesion accelerator-curing catalyst-colorant-titanate
 coupling agent-contg., Permapol P 965)

IT 131-57-7, 2-Hydroxy-4-methoxybenzophenone
 RL: USES (Uses)
 (UV absorbents, sealing material compns. contg.)

IT 919-30-2, A 1100 2530-83-8, A 187
 RL: USES (Uses)
 (adhesion accelerators, sealing material compns. contg.)

IT 7631-86-9, Silica, miscellaneous
 RL: MSC (Miscellaneous)
 (antisag agents, sealing material compns. contg.)

IT 13463-67-7, Titanium oxide (TiO₂), miscellaneous
 RL: MSC (Miscellaneous)
 (colorants, sealing material compns. contg.)

LT 61417-49-0, KR-TTS 65380-84-9, KR 44 65460-53-9, KR 46B 67691-13-8,
 KR 38S 67729-57-1, KR 138S
 RL: USES (Uses)
 (coupling agents, sealing material compns. contg.)

IT 1309-60-0, Lead dioxide
 RL: CAT (Catalyst use); USES (Uses)
 (curing catalysts, sealing material compns. contg.)

IT 471-34-1, Calcium carbonate, uses
 RL: USES (Uses)
 (fillers, sealing material compns. contg.)

IT 117-81-7, Dioctyl phthalate
 RL: MOA (Modifier or additive use); USES (Uses)
 (plasticizers, sealing material compns. contg.)

IT 157971-36-3, Permapol P 795
 RL: USES (Uses)
 (sealing compns., plasticizer-inorg. filler-antisag agent-UV
 absorbent-adhesion accelerator-curing catalyst-colorant-titanate
 coupling agent-contg.)

L27 ANSWER 15 OF 36 CA COPYRIGHT 2003 ACS
 AN 119:228197 CA
 TI Rapidly curable one-component sealing compositions
 IN Maeda, Etsuro; Watabe, Teruo; Wakabayashi, Ichitami
 PA Nogawa Kemikaru Kk, Japan
 SO Jpn. Kokai Tokkyo Koho, 7 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 IC ICM C09K003-10
 ICS C08L081-04
 CC 42-11 (Coatings, Inks, and Related Products)
 Section cross-reference(s): 38

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 05117626	A2	19930514	JP 1991-203291	19910719
PRAI	JP 1991-203291		19910719		
AB	The O-curable compns. with good chem. resistance, durability, weatherability, and mech. strength contain modified polysulfides 100, plasticizers 30-100, inorg. fillers 50-200, sagging inhibitors 3-10, UV absorbers 0-2, adhesion accelerators 0-2, curing catalysts 2-10, and coloring agents 0-15 parts. Thus, Permapol P965 (modified polysulfide) 100, DOP 50, Ca2CO3 160, silicic acid 5, 2-hydroxy-4-methoxybenzophenone 0.8, A 187 (silane coupler) 0.1, ZnO 0.1, porous silica 5.0, TiO2 5, and carbon black 5 parts were kneaded in N to give a compn. showing tack-free time 40-90 min (20.degree.), which was cured within 10-15 days (10 mm thickness, 20.degree.).				
ST	rapidly oxygen curable polysulfide sealant; sealant polysulfide silica weatherability durability; curing agent polysulfide metal oxide; chem resistance polysulfide plasticizer sealing; mech strength UV absorber polysulfide; filler sagging prevention polysulfide sealant				
IT	Coupling agents (bonding accelerators, for polysulfide-based sealants)				
IT	Carbon black, uses RL: MSC (Miscellaneous) (coloring agents, for polysulfide-based sealing compns.)				
IT	Clays, uses RL: USES (Uses) (fillers, for polysulfide-based sealing compns.)				
IT	Crosslinking agents (metal oxides and porous silica, for polysulfide-based sealants)				
IT	Plasticizers (phthalates, for polysulfide-based sealants)				
IT	Sealing compositions (polysulfide-based, rapidly oxygen-curable, crosslinking agents for, with chem. and mech. resistance and durability and weatherability)				
IT	Polysulfides RL: USES (Uses) (sealing compns., rapidly curable, crosslinking agents for, with durability and weatherability and mech. strength)				
IT	Sealing compositions (chem. resistant, polysulfide-based, rapidly oxygen-curable, contg. crosslinking agents)				
IT	Chemically resistant materials (sealants, polysulfide-based, rapidly oxygen-curable, contg. crosslinking agents)				
IT	131-57-7, 2-Hydroxy-4-methoxy-benzophenone RL: USES (Uses) (UV absorbers, for polysulfide-based sealing compns.)				
IT	919-30-2, A1100 2530-83-8, A187 RL: USES (Uses) (bonding accelerators, for polysulfide-based sealants)				
IT	13463-67-7, Titanium oxide, miscellaneous RL: MSC (Miscellaneous) (coloring agents, for polysulfide-based sealing compns.)				
IT	1309-60-0, Lead dioxide 1314-13-2, Zinc oxide, miscellaneous RL: MOA (Modifier or additive use); USES (Uses) (crosslinking agents, for polysulfide-based sealing compns.)				
IT	471-34-1, Calcium carbonate, uses RL: USES (Uses) (fillers, for polysulfide-based sealing compns.)				
IT	78-40-0, Triethyl phosphate 105-99-7, Dibutyl adipate 109-31-9, Dihexyl azelate 109-43-3, Dibutyl sebacate 117-81-7, Dioctyl phthalate RL: MOA (Modifier or additive use); USES (Uses) (plasticizers, for polysulfide-based sealants)				
IT	7631-86-9, Silica, miscellaneous				

RL: MSC (Miscellaneous)
(porous, crosslinking agents, for polysulfide-based sealing compns.)

- L27 ANSWER 16 OF 36 CA COPYRIGHT 2003 ACS
AN 118:234623 CA
TI Silane crosslinking of PVC. I. Grafting of mercaptoalkylalkoxysilanes onto PVC: properties of the grafted and crosslinked product
AU Kelnar, I.; Schatz, M.
CS Inst. Macromol. Chem., Czech. Acad. Sci., Prague, 162 06, Czech.
SO Journal of Applied Polymer Science (1993), 48(4), 657-68
CODEN: JAPNAB; ISSN: 0021-8995
DT Journal
LA English
CC 35-8 (Chemistry of Synthetic High Polymers)
AB The reaction of PVC with mercaptoalkyltrialkoxysilanes yielded silane-grafted PVC that could be crosslinked by a hydrolytic mechanism. The grafting of the silanes on the plasticized and unplasticized PVC was carried out at 180.degree. during processing in the presence of basic Pb-contg. stabilizers. The reaction was favorably affected by the presence of plasticizers and lubricants contg. polar--preferably ester--groups. The silane-grafted and crosslinked polymers had satisfactory thermal stability. The results of strength measurements at elevated temps. after crosslinking by H2O were presented.
ST PVC silane crosslinking; mercaptoalkylalkoxysilane crosslinking PVC
IT Plasticizers
(for PVC, crosslinking with mercaptoalkylalkoxysilanes in relation to)
IT Crosslinking agents
(mercaptoalkylalkoxysilanes, for PVC)
IT Crosslinking
(of PVC with mercaptoalkylalkoxysilanes)
IT Soaps
RL: USES (Uses)
(stabilizers, crosslinking of PVC by mercaptoalkoxysilanes in relation to)
IT 111-46-6, Diethylene glycol, uses 134-32-7, 1-Naphthylamine 1309-48-4, Magnesium oxide (MgO), uses 1314-13-2, Zinc oxide, uses 1317-36-8, Lead oxide, uses 15347-57-6D, basic 25322-68-3
RL: USES (Uses)
(additives, crosslinking of PVC via mercaptoalkylalkoxysilanes in relation to)
IT 9002-86-2, PVC
RL: RCT (Reactant); RACT (Reactant or reagent)
(crosslinking of, via mercaptoalkylalkoxysilanes)
IT 4420-74-0D, 3-Mercaptopropyltrimethoxysilane, reaction products with PVC 9002-86-2D, PVC, reaction products with mercaptoalkylalkoxysilanes 63392-36-9D, reaction products with PVC
RL: PRP (Properties)
(mech. and thermal properties of)
IT 84-66-2, Diethyl phthalate 84-74-2, Dibutyl phthalate 103-23-1, Di(2-ethylhexyl) adipate 117-81-7, Di(2-ethylhexyl) phthalate 119-06-2, Di(tridecyl) phthalate 122-62-3, Dioctyl sebacate 126-73-8, Tributyl phosphate, uses 1330-78-5, Tricresyl phosphate 26761-40-0 28265-33-0, Butadiene-fumaric acid copolymer
RL: MOA (Modifier or additive use); USES (Uses)
(plasticizers, crosslinking of PVC via mercaptoalkylalkoxysilanes in relation to)
IT 77-58-7, Dibutyltin dilaurate 1072-35-1, Lead stearate 7440-39-3D, Barium, fatty acid salts 7440-43-9D, Cadmium, fatty acid salts 7440-66-6D, Zinc, fatty acid salts 7440-70-2D, Calcium, fatty acid salts 7446-14-2, Lead sulfate
RL: USES (Uses)
(stabilizers, crosslinking of PVC via mercaptoalkylalkoxysilanes in relation to)

AN 118:214202 CA
 TI Silane crosslinking of PVC and its application in the cable industry
 AU Schatz, Miroslav; Kelnar, Ivan
 CS Vys. Sk. Chem.-Technol., Prague, Czech.
 SO Elektroizolacna a Kablova Technika (1991), 44(3), 7-11
 CODEN: EKTLA6; ISSN: 0322-7111
 DT Journal
 LA Slovak
 CC 37-6 (Plastics Manufacture and Processing)
 Section cross-reference(s): 38
 AB Efficient crosslinking of PVC was attained by reacting plasticized PVC with 3-mercaptopropyltrimethoxysilane (I) in the presence of basic Pb heat stabilizers (having the capacity under particular conditions to substitute Cl atoms in the PVC chain and to bind Cl⁻ ions), followed by treatment of the modified PVC with hot water or steam leading to hydrolysis of the methoxy groups and formation of a crosslinked product. The effect of water or steam temp., as well as concn. of I, plasticizer, and heat stabilizer on crosslinking of PVC was studied. The crosslinked product showed very good thermal stability, solvent resistance, and mech. and dielec. properties. The crosslinking process could be used in manuf. of elec. insulators for cables.
 ST PVC crosslinking mercaptoalkoxysilane; lead stabilizer PVC crosslinking mercaptoalkoxysilane; elec insulator cable crosslinked PVC; mercaptopropyltrimethoxysilane crosslinking PVC
 IT Plasticizers
 (crosslinking of (mercaptopropyl)trimethoxysilane-modified PVC in presence of)
 IT Steam
 (crosslinking of (mercaptopropyl)trimethoxysilane-modified PVC in, effect of temp. on)
 IT Electric insulators and Dielectrics
 (for cables, (mercaptopropyl)trimethoxysilane-modified PVC, crosslinking of)
 IT Heat stabilizers
 (lead compds., crosslinking of (mercaptopropyl)trimethoxysilane-modified PVC in presence of)
 IT Crosslinking
 (hydrolytic, of (mercaptopropyl)trimethoxysilane-modified PVC)
 IT 4420-74-0D, (3-Mercaptopropyl)trimethoxysilane, reaction products with PVC 9002-86-2D, PVC, reaction products with (mercaptopropyl)trimethoxysilane
 RL: USES (Uses)
 (crosslinked, prepn. of and use as elec. insulator for cables)
 IT 7732-18-5, Water, reactions
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (crosslinking of (mercaptopropyl)trimethoxysilane-modified PVC in hot, effect of temp. on)
 IT 77-58-7, Dibutyltin dilaurate 1072-35-1, Lead stearate 12202-17-4, Tribasic lead sulfate
 RL: MOA (Modifier or additive use); USES (Uses)
 (heat stabilizers, crosslinking of (mercaptopropyl)trimethoxysilane-modified PVC in presence of)
 IT 117-81-7, Diisooctyl phthalate 117-84-0, Dioctyl phthalate
 RL: MOA (Modifier or additive use); USES (Uses)
 (plasticizers, crosslinking of (mercaptopropyl)trimethoxysilane-modified PVC in presence of)
 IT 7732-18-5
 RL: USES (Uses)
 (steam, crosslinking of (mercaptopropyl)trimethoxysilane-modified PVC in, effect of temp. on)
 L27 ANSWER 18 OF 36 CA COPYRIGHT 2003 ACS
 AN 118:7830 CA
 TI Surface treatment of aluminum hydroxide by mercaptoalkyltrialkoxysilane
 AU Liptak, Peter

CS Vysk. Ustav Kablov Izolantov, Bratislava, Czech.
 SO Plasty a Kaucuk (1991), 28(6), 165-6
 CODEN: PLKCAS; ISSN: 0322-7340
 DT Journal
 LA Slovak
 CC 37-6 (Plastics Manufacture and Processing)
 AB Mech. properties and thermal stability of bis(2-ethylhexyl)
 phthalate-plasticized and Pb stearate-heat stabilized PVC increased with
 increasing sp. surface of nonmodified Al(OH)₃, as well as
 mercaptopropyltrimethoxysilane-modified Al(OH)₃ fillers and reached a max.
 at sp. surface 4 m²/g.
 ST plasticized PVC aluminum hydroxide filler; silane modification aluminum
 hydroxide PVC; mercaptopropyltrimethoxysilane coupler aluminum hydroxide
 PVC
 IT Heat stabilizers
 (lead stearate, aluminum hydroxide-filled PVC contg., effect of
 mercaptopropyltrimethoxysilane coupler on properties of)
 IT Coupling agents
 (mercaptopropyltrimethoxysilane, aluminum hydroxide-filled PVC contg.,
 properties of)
 IT Surface area
 (of aluminum hydroxide fillers, properties of PVC in relation to)
 IT Plasticizers
 (phthalates, aluminum hydroxide-filled PVC contg., effect of
 mercaptopropyltrimethoxysilane coupler on properties of)
 IT 9002-86-2, Neralit
 RL: USES (Uses)
 (aluminum hydroxide-filled, effect of mercaptopropyltrimethoxysilane
 coupler on properties of)
 IT 4420-74-0, A 189
 RL: USES (Uses)
 (coupling agents, aluminum hydroxide-filled PVC contg., properties of)
 IT 21645-51-2, Aluminum hydroxide, uses
 RL: USES (Uses)
 (fillers, PVC contg., effect of mercaptopropyltrimethoxysilane coupler
 on properties of)
 IT 1072-35-1
 RL: MOA (Modifier or additive use); USES (Uses)
 (heat stabilizers, aluminum hydroxide-filled PVC contg., effect of
 mercaptopropyltrimethoxysilane coupler on properties of)
 IT 117-81-7, Bis(2-ethylhexyl) phthalate
 RL: MOA (Modifier or additive use); USES (Uses)
 (plasticizers, aluminum hydroxide-filled PVC contg., effect of
 mercaptopropyltrimethoxysilane coupler on properties of)

L27 ANSWER 19 OF 36 CA COPYRIGHT 2003 ACS

AN 117:152909 CA
 TI One-liquid injectable silylether-terminated polyether sealants
 IN Kawabata, Kenji
 PA Kanebo NSC K. K., Japan
 SO Jpn. Kokai Tokkyo Koho, 7 pp.
 CODEN: JKXXAF

DT Patent
 LA Japanese
 IC ICM C08L071-02
 ICS C08K005-54; C08L083-06; C09D005-34; C09K003-10
 CC 42-11 (Coatings, Inks, and Related Products)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 04089861	A2	19920324	JP 1990-206084	19900802
PRAI	JP 1990-206084		19900802		

AB The sealants, with viscosity 2000-20,000 cP and thixotropic index (TI)
 value .gtoreq.3.0, comprise title polyethers, curing catalysts,
 organoalkoxysilanes, and thixotropic agents and/or fillers, and optionally

inert diluents. Kaneka MS Polymer 20A 100, Neostan U 100 2, KBM 1003 2, KBM 603 2, DOP 50, and CaCO₃ (CCR) 44 parts were mixed to give a liq. compn. with viscosity 9800 cP (20.degree., 20 rpm) and TI value 3.6 and showing good antisagging ability and fast injection ability (9 s for 10 mL through a 15-mL syringe with a nozzle of 1.8-mm diam. under 1 kg/cm²).

ST polyether alkoxysilane terminated sealant; one liq injectable sealant antisagging

IT Polyethers, uses
RL: USES (Uses)
(alkoxysilyl-terminated, one-liq. sealants, injectable, antisagging)

IT Castor oil
RL: USES (Uses)
(hydrogenated, thixotropic agents, silyl ether-terminated polyether sealants contg., one-liq., injectable, antisagging)

IT Sealing compositions
(one-component, silyl ether-terminated polyether-based, antisagging, injectable)

IT 77-58-7
RL: CAT (Catalyst use); USES (Uses)
(catalyst, one-liq. silyl ether-terminated polyether sealants contg., injectable, antisagging)

IT 75009-88-0
RL: USES (Uses)
(one-liq. sealants contg., injectable, antisagging)

IT 117-81-7, DOP 471-34-1, Calcium carbonate, properties 1760-24-3, KBM 603 2530-83-8, A 187 2530-85-0, A 174 2768-02-7, KBM 1003
RL: USES (Uses)
(one-liq. silyl ether-terminated polyether sealants contg., injectable, antisagging)

L27 ANSWER 20 OF 36 CA COPYRIGHT 2003 ACS

AN 112:160205 CA

TI Heat-resistant NBR and carboxylated NBR. Part II

AU Byers, J. T.; Hewitt, N. L.; Tultz, J. P.

CS Fed. Rep. Ger.

SO Gummi, Fasern, Kunststoffe (1989), 42(9), 436-8, 440, 442, 445-6
CODEN: GFKUED; ISSN: 0176-1625

DT Journal

LA German

CC 39-12 (Synthetic Elastomers and Natural Rubber)

AB The fuel and heat resistance of a std. nitrile rubber (Krynac 34-35) was compared with that of polymer-bound antioxidant-contg. rubber (Chemigum HR 665) and carboxylated nitrile rubber (Chemigum NX 775). Also detd. were the effects of plasticizer (epoxidized soybean oil, DOP), silane coupling agents (A172, A174, A189), MgO, and antioxidants, in peroxide and semiefficient vulcanizing systems. Chemigum HR 665-semiefficient vulcanizing systems gave better aging results than with peroxide, while Chemigum NX 775 vulcanizates behaved similarly to Krynac in aging tests. The use of Zn 2-mercaptotolyylimidazole antioxidant with peroxide-vulcanized nitrile rubber gave very good results.

ST nitrile rubber antioxidant vulcanization; carboxylated nitrile rubber heat resistance

IT Rubber, synthetic
RL: PRP (Properties)
(acrylonitrile-(anilinophenyl)methacrylamide-butadiene, aging resistance of, vulcanizing and antioxidant systems effect on)

IT Rubber, nitrile, properties
RL: PRP (Properties)
(aging resistance of Krynac 34-35, vulcanizing and antioxidant systems effect on)

IT Plasticizers
(for nitrile rubber, aging behavior in relation to)

IT Antioxidants
Vulcanization accelerators and agents

(for nitrile rubber, aging resistance in relation to)

IT Coupling agents
(silane, for nitrile rubber, aging resistance in relation to)

IT Rubber, nitrile, properties
RL: PRP (Properties)
(carboxy-contg., aging resistance of Chemigum NX 775, vulcanizing and antioxidant systems effect on)

IT Soybean oil
RL: MOA (Modifier or additive use); USES (Uses)
(epoxidized, plasticizers, for nitrile rubber, aging behavior in relation to)

IT Polymer degradation
(thermal, of nitrile rubber, effect of rubber structure and vulcanizing system on)

IT 26780-96-1, Poly(2,2,4-trimethyl-1,2-dihydroquinoline) 68033-85-2
RL: USES (Uses)
(antioxidants, nitrile rubber vulcanizates contg., aging behavior of)

IT 1067-53-4, A172 2530-85-0, A174 4420-74-0, A189
RL: USES (Uses)
(coupling agents, for nitrile rubber, aging behavior in relation to)

IT 1309-48-4, Magnesium oxide, properties
RL: PRP (Properties)
(nitrile rubber vulcanizates contg., aging resistance of)

IT 80-43-3, Dicumyl peroxide 102-77-2, Benzothiazole-2-sulfene morpholide 103-34-4 137-26-8, TMTD
RL: USES (Uses)
(nitrile rubber vulcanized with, aging resistance of)

IT 117-81-7, DOP
RL: MOA (Modifier or additive use); USES (Uses)
(plasticizers, for nitrile rubber, aging behavior in relation to)

IT 43063-09-8
RL: PRP (Properties)
(rubber, aging resistance of Chemigum HR 665, vulcanizing and antioxidant systems effect on)

IT 9003-18-3
RL: USES (Uses)
(rubber, aging resistance of Krynac 34-35, vulcanizing and antioxidant systems effect on)

IT 9003-18-3
RL: USES (Uses)
(rubber, carboxy-contg., aging resistance of Chemigum NX 775, vulcanizing and antioxidant systems effect on)

L27 ANSWER 21 OF 36 CA COPYRIGHT 2003 ACS

AN 112:58021 CA

TI Room temperature-curable heat-resistant polyurethane elastomer compositions

IN Kasai, Atsushi; Ota, Takayuki; Goto, Junichi

PA Mitsubishi Kasei Corp., Japan

SO Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM C08G018-08

ICS C08G018-69; C08L075-04

CC 39-9 (Synthetic Elastomers and Natural Rubber)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 01132620	A2	19890525	JP 1987-288546	19871117
	JP 07039538	B4	19950501		
PRAI	JP 1987-288546		19871117		

AB The title compns. giving cured products with good resistance to heat, hydrolysis, and weather are manufd. by reaction of free-flowing polyhydroxy hydrocarbon polymers contg. 1-8 (av.) OH per mol. (no.-av.

mol. wt. 500-20,000 and iodine value .ltoreq.100) with isocyanates selected from (polymeric) diphenylmethane diisocyanate and derivs. in the presence of coupling agents and plasticizers with soly. parameter 5.0-10.5 (Ca/cm³)^{1/2} and/or hydrocarbon oils with aniline point .ltoreq.56.0.degree.. Thus, 8.27 g Polytail HA (hydrogenated polyhydroxypolybutadiene; av. OH 1.8 per mol., no-av.-mol. wt. 2000, iodine value 4.5) was treated with 1 g PAPI 135 in the presence of dioctyl phthalate with soly. parameter 7.9 (Ca/cm³)^{1/2} and 0.19 g A 187 (a silane coupling agent) at room temp. for 96 h to give a polyurethane elastomer compn., which gave heat-resistant cured product with uniform transparency.

ST polyurethane elastomer compn curable; room temp curable polyurethane elastomer; heat resistant polyurethane elastomer compn

IT Rubber, urethane, uses and miscellaneous
RL: USES (Uses)
(compns., room temp.-curable, heat-resistant)

IT Hydrocarbon oils
RL: USES (Uses)
(polyurethane elastomer compns., heat-resistant)

IT Heat-resistant materials
(polyurethane elastomers compns.)

IT Hydrocarbon oils
RL: USES (Uses)
(arom., polyurethane elastomers manuf. in presence of coupling agents and)

IT 117-81-7, Dioctyl phthalate
RL: MOA (Modifier or additive use); USES (Uses)
(plasticizers, for heat-resistant polyurethane elastomer compns.)

IT 2530-83-8, A 187 56092-65-0
RL: USES (Uses)
(polyurethane elastomer compns., heat-resistant)

IT 112340-15-5 124847-24-1
RL: USES (Uses)
(rubber compn., room temp.-curable, heat-resistant)

L27 ANSWER 22 OF 36 CA COPYRIGHT 2003 ACS

AN 111:175286 CA

TI Crosslinking of PVC by organofunctional silanes

AU Kelnar, Ivan; Schatz, Miroslav

CS VSCHT, Prague, Czech.

SO Sbornik Vysoke Skoly Chemicko-Technologicke v Praze, S: Polymery--Chemie, Vlastnosti a Zpracovani (1988), S17, 31-41
CODEN: SVSZD5; ISSN: 0139-908X

DT Journal

LA Czech

CC 37-6 (Plastics Manufacture and Processing)

AB Modification of PVC with mercaptopropyltrimethoxysilane (I), mercaptopentyltriethoxysilane (II), or aminopropyltriethoxysilane (III) gave reaction products capable of hydrolytic crosslinking in the presence of water or air humidity. Modification of PVC with I and II occurred only in the presence of basic Pb stabilizers acting as catalysts; the reaction was also aided by the presence of plasticizers and lubricants contg. polar ester groups. Modification of PVC with III occurred also in the absence of the Pb stabilizer but its presence increased the modification effectiveness. Crosslinking of the modified PVC samples was affected significantly by the presence of bis(2-ethylhexyl) phthalate plasticizer. The cured samples exhibited higher tensile strength, dimensional stability, and thermal stability than nonmodified PVC.

ST mercaptoalkoxysilane crosslinking PVC; aminopropyltriethoxysilane crosslinking PVC; silane crosslinking PVC; hydrolytic crosslinking PVC mercaptoalkoxysilane modification

IT Plasticizers
(bis(ethylhexyl) phthalate, crosslinking of alkoxysilane-modified PVC in presence of)

IT Crosslinking
(hydrolytic, of alkoxysilane-modified PVC)

IT Siloxanes and Silicones, preparation
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (poly(vinyl chloride)-, crosslinked, prepn. and properties of)

IT 9002-86-2P, PVC
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (alkoxysilane-crosslinked, prepn. and properties of)

IT 919-30-2, Aminopropyltriethoxysilane 4420-74-0 63392-36-9
 RL: USES (Uses)
 (in PVC crosslinking)

IT 117-81-7, Bis(2-ethylhexyl) phthalate
 RL: MOA (Modifier or additive use); USES (Uses)
 (plasticizers, crosslinking of alkoxysilane-modified PVC in presence of)

IT 12202-17-4, Tribasic lead sulfate
 RL: USES (Uses)
 (stabilizers, crosslinking of alkoxysilane-modified PVC in presence of)

L27 ANSWER 23 OF 36 CA COPYRIGHT 2003 ACS

AN 111:155152 CA

TI Bleeding-resistant vinyl chloride resin moldings

IN Ohayashi, Atsushi; Takeda, Yuji

PA Mitsubishi Kasei Vinyl K. K., Japan

SO Jpn. Kokai Tokkyo Koho, 5 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM C08L027-06

ICS C08K005-20; C08K005-54

CC 37-6 (Plastics Manufacture and Processing)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 01038462	A2	19890208	JP 1987-194218	19870803
PRAI	JP 1987-194218		19870803		
AB	The title moldings contain vinyl chloride resins, silanes having hydrolyzable groups bonded to Si, and amide lubricants. PVC 100, dioctyl phthalate 50, epoxidized soybean oil 3.0, Ba-Zn stabilizer 2, tetramethoxysilane tetramer (I) 5, and methylenebis(oleamide) (II) 0.4 part were roll kneaded to form a 0.3-mm film having good resistance to soiling by a rouge and a dry ink. When the film was laminated with a polystyrene sheet, wrapped with Al foil, and heated at 50.degree. under load (2 kg/100 cm ²) for 3 days, the polystyrene sheet showed wt. increase <30 mg/100 cm ² , vs. .gtoreq.80 without I or II.				
ST	PVC bleeding soiling resistance; soilproofing PVC lubricant silane; bleeding resistance PVC plastisol; silane PVC nonbleeding nonsoiling; amide lubricant PVC nonbleeding; methylenebisoleamide lubricant PVC; oleamide methylenebis lubricant PVC				
IT	Plasticizers (PVC contg., bleeding and soiling-resistant)				
IT	Lubricants (amides, plasticized PVC contg., bleeding- and soiling-resistant)				
IT	9002-86-2, Poly(vinyl chloride) RL: USES (Uses) (film, plasticized, bleeding- and soiling-resistant)				
IT	109-23-9 10436-16-5 RL: USES (Uses) (lubricants, plasticized PVC contg., bleeding- and soiling-resistant)				
IT	681-84-5D, Tetramethoxysilane, hydrolyzed 13822-56-5, .gamma.-Aminopropyltrimethoxysilane 62804-30-2D, hydrolyzed 122161-66-4D, hydrolyzed RL: USES (Uses) (plasticized PVC contg., bleeding- and soiling-resistant)				
IT	117-81-7 RL: MOA (Modifier or additive use); USES (Uses) (plasticizers, PVC contg., bleeding- and soiling-resistant)				

L27 ANSWER 24 OF 36 CA COPYRIGHT 2003 ACS

AN 110:25061 CA

TI Plasticizer migration-prevented soft vinyl chloride polymer moldings

IN Kato, Nobuyoshi; Matsuoka, Daizo

PA Toa Gosei Chemical Industry Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 5 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM C08J005-18

ICS C08L077-00; C09D003-58

CC 38-3 (Plastics Fabrication and Uses)

Section cross-reference(s): 42

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 63077945	A2	19880408	JP 1986-219647	19860919
PRAI	JP 1986-219647		19860919		

AB Title moldings have surface layers prepd. by heating compns. contg. (a) (co)polyamides mainly contg. amide repeating units prepd. from piperazine (I) and aliph. dicarboxylic acids and (b) epoxysilanes. Thus, 0.3 g A 187 was mixed with a 100 g 80% aq. EtOH soln. of 15 g a polyamide [m.p. 110-115, d. 1.11, relative viscosity 1.55, prepd. from 15% equimolar azelaic acid-I salt, 70% equimolar dodecanedicarboxylic acid-I salt, and 15% .omega.-aminoundecanoic acid] to prep. a soln. of a polyamide compn., which was applied on a 3-mm soft PVC sheet, prepd. by T-die extruding a compn. contg. PVC (d.p. 1100) 100, DOP 110, a stabilizer 3, a reinforcer 10, and a lubricant 3 parts, and heated at 100.degree. for 3 min to obtain a film (thickness 5 .mu.m)-covered soft PVC sheet. The covered sheet showed no surface tackiness after 24 h at 80.degree. in an oven and peel strength 8.6 kg/mm when adhered at 10 kg/cm² to acryl-melamine coating-electrodeposited Fe plate by a pressure sensitive adhesive and 6.1 kg/mm after similarly treated followed by keeping at 80.degree. for 24 h in an oven, compared with surface tackiness, 6.0, and 0, resp., for an uncovered soft PVC sheet.

ST plasticizer migration prevention PVC sheet; polyamide epoxysilane layer PVC sheet; piperazine copolymer epoxysilane surface layer; azelaic acid copolymer epoxysilane layer; dodecandicarboxylic acid copolymer epoxysilane layer; aminoundecanoic acid copolymer epoxysilane layer

IT Plasticizers

(migration prevention of, in soft vinyl chloride polymer moldings, by polyamide-epoxysilane coatings)

IT Coating materials

(polyamide-epoxysilane blends, on soft vinyl chloride polymer moldings, for plasticizer migration prevention)

IT 118106-10-8

RL: USES (Uses)

(coatings, contg. epoxysilanes, for soft vinyl chloride polymer moldings, for plasticizer migration prevention)

IT 2530-83-8

RL: USES (Uses)

(coupler, coatings contg., for soft vinyl chloride polymer moldings for plasticizer migration prevention)

IT 89-04-3, Trioctyl trimellitate 117-81-7, DOP

RL: MOA (Modifier or additive use); USES (Uses)

(plasticizers, migration prevention of, in soft vinyl chloride polymer moldings, by polyamide-epoxysilane coatings)

IT 9002-86-2, PVC

RL: USES (Uses)

(soft sheet, coatings for, polyamide-epoxysilane blends as, for plasticizer migration prevention)

L27 ANSWER 25 OF 36 CA COPYRIGHT 2003 ACS

AN 108:121925 CA

TI Application of photopolymers to magnetic recording materials. Improvement in dispersibilities and sensitivity characteristics of photomagnetic polymer

AU Higuchi, Youichi; Nakamura, Kenichiro

CS Fac. Eng., Tokai Univ., Hiratsuka, Japan

SO Nippon Insatsu Gakkaishi (1987), 24(4), 333-41
CODEN: NIGAEV; ISSN: 0914-3319

DT Journal

LA Japanese

CC 74-12 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

AB Photomagnetic polymers were obtained by dispersing ferrites in photohardening polymers, and their chem. and phys. characteristics were evaluated. These ferrites were then treated by silane coupling reagents for dispersing in the photopolymers. The exptl. results showed that vinylsilane couplers are effective in improving the dispersion of ferrites in the polymer binder. Me methacrylate and styrene polymers and a com. polymer, were tested as binders. Their sensitivity characteristics were examd. Elec. test signals were recorded and detected using coated samples of the photomagnetic polymers on poly(ethylene terephthalate) films. Magnetic hysteresis curves of the samples were measured and a fairly good magnetic property was obsd.

ST magnetic optical recording photopolymer; ferrite polymer magnetooptical recording

IT Printing, nonimpact
(magnetog., ferrite-contg. polymers for)

IT Recording materials
(magnetooptical, ferrite-contg. polymer as, silane coupling agents in)

IT 1760-24-3, .gamma.-(2-Aminoethyl)aminopropyltrimethoxysilane
2530-83-8, .gamma.-Glycidoxypropyltrimethoxysilane 2530-85-0,
.gamma.-Methacryloxypropyltrimethoxysilane 4420-74-0
33401-49-9
RL: USES (Uses)
(coupling agent, in magnetooptical recording material of ferrite-contg. polymer)

IT 67-64-1, Acetone, uses and miscellaneous 75-05-8, Methylcyanide, uses and miscellaneous 79-20-9, Methyl acetate 109-99-9, Tetrahydrofuran, uses and miscellaneous 1330-20-7, Xylene, uses and miscellaneous
RL: USES (Uses)
(developer compn. contg., for ferrite-contg. polymeric magnetooptical recording material)

IT 9003-53-6, Polystyrene 9011-14-7, PMMA 73562-25-1, Tevista
RL: USES (Uses)
(ferrite-contg. magnetooptical recording material of, with silane coupling agent)

IT 1309-37-1, uses and miscellaneous
RL: USES (Uses)
(gamma-, magnetooptical recording material of polymeric binder contg. FX6410, silane deriv. coupling agents for)

IT 117-81-7, Dioctylphthalate
RL: MOA (Modifier or additive use); USES (Uses)
(plasticizer, for ferrite-contg. polymeric magnetooptical recording material)

IT 84-65-1, Anthraquinone 94-36-0, Benzoylperoxide, uses and miscellaneous 17372-87-1, Eosine Y
RL: USES (Uses)
(sensitizer, in ferrite-contg. polymeric magnetooptical recording material)

L27 ANSWER 26 OF 36 CA COPYRIGHT 2003 ACS

AN 106:224530 CA

TI Waterless lithographic direct-imaging plates

IN Kamaishi, Tadami; Tawara, Junko

PA Toray Industries, Inc., Japan

SO Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DT Patent
LA Japanese
IC ICM B41C001-10
ICS B41N001-14
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 62007552	A2	19870114	JP 1985-146839	19850705
PRAI	JP 1985-146839		19850705		
AB	Plates coated with image material-adhesive silicone compns. are treated with liq. org. compds. contg. >1 of O, N, S, and/or P, and having mol. wt. >1000 as thin films with close contact using other smooth surfaces and heated to improve durability. The liq. org. compds. are DOP, Et acetoacetate, etc.				
ST	waterless direct imaging lithog plate; silicone lithog plate DOP treatment				
IT	Siloxanes and Silicones, uses and miscellaneous				
	RL: USES (Uses)				
	(waterless lithog. direct-imaging plates, treatment of, with liq. org. compds. for improved durability)				
IT	Lithographic plates				
	(waterless, direct-imaging, treatment of, with liq. org. compds. for improved durability)				
IT	2530-85-0				
	RL: USES (Uses)				
	(coatings, contg. dimethylpolysiloxane and glycidoxypyltrimethoxysilane, for waterless lithog. direct-imaging plates)				
IT	2530-83-8, .gamma.-Glycidoxypyltrimethoxysilane				
	RL: USES (Uses)				
	(coatings, contg. dimethylpolysiloxane and methacryloxypropyltrimethoxysilane, for waterless lithog. direct-imaging plates)				
IT	57-55-6, uses and miscellaneous 67-68-5, DMSO, uses and miscellaneous 68-12-2, DMF, uses and miscellaneous 77-89-4 77-90-7 90-02-8, Salicylaldehyde, uses and miscellaneous 100-52-7, Benzaldehyde, uses and miscellaneous 103-83-3, N,N-Dimethylbenzylamine 110-80-5, Ethyl cellosolve 112-55-0, Dodecylmercaptan 117-81-7, DOP 141-97-9 1067-33-0 1806-54-8, Trioctylphosphate				
	RL: USES (Uses)				
	(treatment by, of silicone waterless lithog. direct-imaging plates, for improved durability)				

L27 ANSWER 27 OF 36 CA COPYRIGHT 2003 ACS
AN 106:167390 CA
TI Capacitors
IN Sakurai, Yasuo
PA Matsushita Electric Industrial Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 3 pp.
CODEN: JKXXAF

DT Patent
LA Japanese
IC ICM H01B003-20
ICS H01G004-22
CC 76-10 (Electric Phenomena)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 61171004	A2	19860801	JP 1985-10328	19850123
PRAI	JP 1985-10328		19850123		
AB	Capacitors prepd. by rolling a capacitor element consisting of electrode materials and a polypropylene film dielec. body are impregnated with a nonhalogenated insulation oil contg. epoxidized linseed oil and a silane				

coupling agent. Capacitors having a high potential gradient are prepd. Thus, a polypropylene film having Zn coatings on both sides was impregnated with dioctyl phthalate contg. 0.5 wt.% .gamma.-methacryloxypropyltrimethoxysilane and 1 wt.% epoxidated linseed oil to give a capacitor of electrostatic capacitance 12 .mu.F, and which showed a resistance voltage of 950 V at 80.degree..

ST capacitor silane coupling agent; insulation oil silane coupling agent capacitor; epoxidated linseed insulation oil capacitor

IT Linseed oil

RL: USES (Uses)

(epoxidated, in insulation oil for impregnating dielec. bodies in capacitor manuf.)

IT Coupling agents

(silanes, for capacitor insulating oils)

IT Electric insulators and Dielectrics

(capacitor, oils, epoxidated linseed oil and silane coupling agents for)

IT 117-81-7, Dioctyl phthalate

RL: USES (Uses)

(for impregnating dielec. bodies in capacitor manuf.)

IT 78-08-0, Vinyltriethoxysilane 1760-24-3 2530-83-8,

.gamma.-Glycidoxypopyltrimethoxysilane 2530-85-0, .gamma.-

Methacryloxypropyltrimethoxysilane 2530-87-2, .gamma.-

Chloropropyltrimethoxysilane 4420-74-0, .gamma.-

Mercaptopropyltrimethoxysilane 7803-62-5D, Silane, compds.

RL: USES (Uses)

(in insulation oil for impregnating dielec. bodies in capacitor manuf.)

L27 ANSWER 28 OF 36 CA COPYRIGHT 2003 ACS

AN 105:44049 CA

TI Electromagnetic wave shielding resin compositions

IN Nabeta, Kenji; Kahara, Isamu

PA Denki Kagaku Kogyo K. K., Japan

SO Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM C08J005-04

ICS C08L055-02; H05K009-00

CC 37-6 (Plastics Manufacture and Processing)

Section cross-reference(s): 76, 77

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 61023629	A2	19860201	JP 1984-145180	19840712
	JP 04028010	B4	19920513		
PRAI	JP 1984-145180		19840712		

AB Compns. contg. an unsatd. nitrile-diene rubber-arom. vinyl compd. copolymer or a mixt. of this copolymer and an unsatd. nitrile-arom. vinyl compd. copolymer 57-90, a plasticizer 3-25, carbon fibers 5-40, and a coupling agent 0.2-5% have good impact resistance and are useful in prepg. casings for electronic app., etc. Thus, a mixt. of 10:50:40 ABS resin 32, 30:70 acrylonitrile-styrene copolymer 47, DOP (Vinicizer 80) 5, carbon fibers (Besfite HTAC 6s) 15, and .gamma.-glycidoxypopyltrimethoxysilane 1% was injection molded to give a molding having electromagnetic wave shielding effect 30 dB and Izod impact strength 22 kg-cm/cm, vs. 15 and 188 resp., for a molding contg. 1% DOP instead of 5%.

ST ABS DOP carbon fiber blend; electromagnetic wave shield ABS blend

IT Plasticizers

(DOP and adipic acid esters, ABS-acrylonitrile-styrene copolymer blends contg. carbon fibers and coupling agents and, for electromagnetic wave shields)

IT Carbon fibers

RL: USES (Uses)

(electroconductive agents, ABS-acrylonitrile-styrene copolymer blends

contg. coupling agents and plasticizers and, for electromagnetic wave shields)

IT Plastics
RL: USES (Uses)
(plasticizer- and carbon fiber- and coupling agent-contg., for electromagnetic wave shields)

IT Coupling agents
(.gamma.-glycidoxypropyltrimethoxysilane and isopropyltriisostearoyl titanate, ABS-acrylonitrile-styrene copolymer blends contg. plasticizers and carbon fibers and, for electromagnetic wave shields)

IT Shields
(electromagnetic, ABS-acrylonitrile-styrene copolymer blends contg. carbon fibers and plasticizers and coupling agents as)

IT 9003-54-7
RL: USES (Uses)
(ABS-plasticizer-carbon fiber-coupling agent blends, for electromagnetic wave shields)

IT 9003-56-9 26375-92-8
RL: USES (Uses)
(acrylonitrile-styrene copolymer-plasticizer-carbon fiber-coupling agent blends, for electromagnetic wave shields)

IT 2530-83-8 61417-49-0
RL: USES (Uses)
(coupling agents, ABS-acrylonitrile-styrene copolymer blends contg. plasticizers and carbon fibers and, for electromagnetic wave shields)

IT 117-81-7 124-04-9D, esters
RL: MOA (Modifier or additive use); USES (Uses)
(plasticizers, ABS-acrylonitrile-styrene copolymer blends contg. carbon fibers and coupling agents and, for electromagnetic wave shields)

L27 ANSWER 29 OF 36 CA COPYRIGHT 2003 ACS

AN 103:58012 CA

TI Photochromic compositions

IN Eguchi, Kiyohisa; Tsukamoto, Yoshito; Kawakami, Takashi

PA Agency of Industrial Sciences and Technology, Japan; Chikubu K. K.

SO Brit. UK Pat. Appl., 15 pp.

CODEN: BAXXDU

DT Patent

LA English

IC ICM C08K003-40

ICS C08K003-10

CC 57-1 (Ceramics)

Section cross-reference(s): 38

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	GB 2144433	A1	19850306	GB 1984-16316	19840627
	GB 2144433	B2	19861210		
	JP 61004763	A2	19860110	JP 1984-125856	19840619
	JP 62044023	B4	19870917		
PRAI	JP 1983-99070		19830627		
	JP 1984-125856		19840619		

AB A strong, easily molded material which darkens reversibly when exposed to sunlight is prepd. by mixing a .apprx.37-350 .mu. photochromic glass powder with a transparent or semitransparent synthetic resin with a n similar to the glass and a coupling agent to prevent the formation of an air layer between the glass particle and resin which may reduce transmittance. Thus, a compn. was prepd. by mixing vinyl chloride resin [9002-86-2] 100, dioctyl phthalate [117-81-7] 100, and Super Photo Brown photochromic glass 20 parts by wt., and applied to the skin portion of a doll. The doll developed a brown hue after 2 min exposure to sunlight and returned to the original whiteness after standing indoors for 10 min.

ST resin glass photochromic compn

IT Alcohols, uses and miscellaneous

Titanates
 Waxes and Waxy substances
 RL: USES (Uses)
 (coupling agents, in resin-photochromic glass mixts. for moldable reversibly-darkening compns.)
 IT Fatty acids, esters
 RL: USES (Uses)
 (esters, in resin-photochromic glass mixts. for moldable reversibly-darkening compns.)
 IT Fatty acids, compounds
 RL: USES (Uses)
 (metal salts, coupling agents, in resin-photochromic glass mixts. for moldable reversibly-darkening compns.)
 IT Amides, uses and miscellaneous
 RL: USES (Uses)
 (fatty, in resin-photochromic glass mixts. for moldable reversibly-darkening compns.)
 IT Glass, oxide
 RL: USES (Uses)
 (photochromic, composites with transparent synthetic resins, for moldable reversibly-darkening compns.)
 IT 4998-51-0
 RL: USES (Uses)
 (UV absorber, in resin-photochromic glass mixts. for moldable reversibly-darkening compns.)
 IT 2530-83-8
 RL: USES (Uses)
 (coupling agents, in resin-photochromic glass mixts. for moldable reversibly-darkening compns.)
 IT 7783-90-6, uses and miscellaneous 7783-96-2 7785-23-1
 RL: USES (Uses)
 (photochromic glass contg., in mixts. with resin for moldable reversibly-darkening compns.)
 IT 117-81-7
 RL: MOA (Modifier or additive use); USES (Uses)
 (plasticizer, in resin-photochromic glass mixts. for moldable reversibly-darkening compns.)
 IT 97444-91-2
 RL: USES (Uses)
 (stabilizer, in resin-photochromic glass mixts. for moldable reversibly-darkening compns.)
 IT 9002-86-2
 RL: USES (Uses)
 (with photochromic glass, for moldable reversibly-darkening compns.)
 IT 9003-54-7 25034-86-0
 RL: USES (Uses)
 (with powd. photochromic glass, for moldable reversibly-darkening compns.)

L27 ANSWER 30 OF 36 CA COPYRIGHT 2003 ACS
 AN 102:177713 CA
 TI Oil impregnated capacitors
 PA Matsushita Electric Industrial Co., Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 4 pp.
 CODEN: JKXXAF

DT Patent
 LA Japanese
 IC ICM H01B003-20
 ICS H01G004-22
 CC 76-10 (Electric Phenomena)
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 60007005	A2	19850114	JP 1983-114536	19830624
PRAI	JP 1983-114536		19830624		

AB Capacitor elements having dielec. bodies of a composite of plastic films and insulating papers are impregnated with an oil mixt. of phthalic acid ester and 1-phenyl-2-cumylethane (I) contg. silane coupling agent. The capacitors have excellent voltage resistance and reliability in both high-temp. and low-temp. ranges. Thus, a capacitor element having polypropylene film as the dielec. layer and impregnated with an oil mixt. of bis(2-ethylhexyl) phthalate (II), I, and .gamma.-methacryloxypropyltrimethoxysilane and dielec. const. 2.35, dielec. tangent loss 0.06% (at 100.degree.), and partial discharge starting voltage 680 V (at -30.degree.) compared to 2.40, 0.25, and 240 resp. for that using II as the impregnation oil. The capacitor was durable in a repeated cycle of heating and cooling.

ST oil impregnated capacitor; phthalate impregnated capacitor; silane coupling agent oil capacitor; phenylcumylethane oil impregnation capacitor; polypropylene oil impregnation capacitor

IT Electric insulators and Dielectrics
(oil-impregnated polypropylene composite, for capacitors)

IT 84-74-2 85-68-7 117-81-7 77851-17-3
RL: USES (Uses)
(capacitor dielec. impregnated with oil mixt. contg.)

IT 2530-83-8 2530-85-0 4420-74-0
RL: USES (Uses)
(coupling agent, in oil mixt. for impregnation of capacitor dielecs.)

IT 9003-07-0
RL: TEM (Technical or engineered material use); USES (Uses)
(dielecs. from oil-impregnated composites contg., for capacitors)

L27 ANSWER 31 OF 36 CA COPYRIGHT 2003 ACS
AN 102:159098 CA
TI Oil-filled capacitor
PA Matsushita Electric Industrial Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC H01B003-20; H01G004-22
CC 76-10 (Electric Phenomena)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 59167910	A2	19840921	JP 1983-41789	19830314
PRAI	JP 1983-41789		19830314		
AB	An insulator oil for an oil-filled capacitor consists of phthalic acid ester, fatty acid ester, maleic acid ester, and/or fumaric acid ester and contains a silane coupling agent.				
ST	insulator oil ester capacitor; silane coupling agent oil capacitor				
IT	Esters, uses and miscellaneous RL: TEM (Technical or engineered material use); USES (Uses) (insulator oils, for elec. capacitors)				
IT	Coupling agents (silanes, for insulator oils of capacitors)				
IT	Electric insulators and Dielectrics (oils, ester, contg. silane coupling agents, for capacitors)				
IT	78-08-0 919-30-2 1067-53-4 2530-83-8 2530-85-0 2530-87-2 4420-74-0		7803-62-5D, derivs., uses and miscellaneous		
	RL: TEM (Technical or engineered material use); USES (Uses) (coupling agents, for insulator oils of capacitors)				
IT	88-99-3D, esters 110-16-7D, esters 110-17-8D, esters 117-81-7				
	RL: TEM (Technical or engineered material use); USES (Uses) (insulator oils, for elec. capacitors)				

L27 ANSWER 32 OF 36 CA COPYRIGHT 2003 ACS
AN 102:159096 CA
TI Oil-filled capacitor
PA Matsushita Electric Industrial Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC H01B003-20; H01G004-22

CC 76-10 (Electric Phenomena)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 59167913	A2	19840921	JP 1983-41792	19830314
	JP 01042630	B4	19890913		
PRAI	JP 1983-41792		19830314		

AB A nonhalogenated insulator oil contg. a silane coupling agent is used for an oil-filled capacitor having a plastic-film and/or insulating-paper dielec. Optionally, an ester such as phthalic acid ester, fatty acid ester, maleic acid ester, or fumaric acid ester or a hydrocarbon such as alkylbenzene may be used as the insulator oil.

ST insulator oil capacitor; silane coupling agent oil capacitor

IT Esters, uses and miscellaneous

RL: TEM (Technical or engineered material use); USES (Uses)
(elec.-insulator oils, for capacitors)

IT Coupling agents

(silanes, for insulator oils of capacitors)

IT Electric insulators and Dielectrics

(oils, silane coupling agents for, of capacitors)

IT 78-08-0 1760-24-3 2530-83-8 2530-85-0 2530-87-2

4420-74-0 7803-62-5D, derivs., uses and miscellaneous

RL: TEM (Technical or engineered material use); USES (Uses)
(coupling agents, for insulator oils of capacitors)

IT 71-43-2D, alkyl deriv. 88-99-3D, esters 110-16-7D, esters 110-17-8D,
esters 117-81-7

RL: TEM (Technical or engineered material use); USES (Uses)
(elec.-insulator oils, for capacitors)

L27 ANSWER 33 OF 36 CA COPYRIGHT 2003 ACS

AN 102:159095 CA

TI Oil-filled electric apparatus

PA Matsushita Electric Industrial Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 3 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC H01B003-20

CC 76-10 (Electric Phenomena)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 59167914	A2	19840921	JP 1983-41793	19830314
PRAI	JP 1983-41793		19830314		

AB A nonhalogenated insulator oil for an oil-filled elec. app. (e.g., capacitor) contains a silane coupling agent 0.02 wt.%.

ST insulator oil elec app; capacitor insulator oil; silane coupling agent
insulator oil

IT Electric apparatus

(silane coupling agents for insulator oils for)

IT Coupling agents

(silanes, for insulator oils)

IT Electric insulators and Dielectrics

(oils, silane coupling agents for)

IT 2530-83-8 2530-85-0 4420-74-0 7803-62-5, uses and
miscellaneous

RL: USES (Uses)

(coupling agents, for insulator oils)

IT 117-81-7

RL: USES (Uses)

(elec.-insulator oils, silane coupling agents for)

L27 ANSWER 34 OF 36 CA COPYRIGHT 2003 ACS
AN 102:98170 CA
TI Electric insulating oil additives
PA Matsushita Electric Industrial Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC H01B003-20
CC 51-8 (Fossil Fuels, Derivatives, and Related Products)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 59167912	A2	19840921	JP 1983-41791	19830314
	JP 63059205	B4	19881118		
PRAI	JP 1983-41791		19830314		
AB	Additives for halogen-free elec. insulating oils are functionalized silanes. Thus, initial dielec. inductive loss and elec. current leakage of dioctyl phthalate [117-81-7] or diarylethane oils were reduced by addn. of 1 wt.% epoxidized soybean oil and 1 wt.% .gamma.-(methacryloyloxy)propyltrimethoxysilane [2530-85-0].				
ST	elec insulating oil additive silane; functionalized silane elec insulator additive				
IT	Soybean oil				
	RL: USES (Uses)				
	(epoxidized, elec. insulating oils contg.)				
IT	Electric insulators and Dielectrics				
	(oils, halogen-free, functionalized silane additives for)				
IT	1067-53-4	1760-24-3	2530-83-8	2530-85-0	2530-87-2
	4420-74-0				
	RL: USES (Uses)				
	(elec. insulating oils contg.)				
IT	74-84-0D, diaryl derivs. 117-81-7				
	RL: USES (Uses)				
	(elec. insulating oils contg., silane additives for)				

L27 ANSWER 35 OF 36 CA COPYRIGHT 2003 ACS
AN 93:9092 CA
TI Poly(vinyl chloride) plastisols with improved adhesiveness
IN Burba, Christian; Volland, Hans Guenter; Esper, Norbert
PA Schering A.-G., Fed. Rep. Ger.
SO Ger. Offen., 19 pp. Division of Ger. Offen. 2,857,425.
CODEN: GWXXBX
DT Patent
LA German
IC B05D007-16; B05D003-02; C09D003-82
CC 36-6 (Plastics Manufacture and Processing)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 2841923	A1	19800403	DE 1978-2841923	19780927
	DE 2841923	B2	19800821		
	DE 2841923	C3	19810521		
	US 4268548	A	19810519	US 1979-79089	19790926
PRAI	DE 1978-2841923		19780927		
AB	Coupling agents contg. azomethine and silane groups in the mol. are used in PVC [9002-86-2] plastisols to improve their adhesion to surfaces. The coupling agents are prep'd. from a triaminosilane and a Schiff base prep'd. from isophoronediamine and Me ₂ CHCHO, from isophorone diisocyanate (I), HS(CH ₂) ₃ Si(OMe) ₃ (II), and a Schiff base of diethylenetriamine (III) and iso-BuCOME (IV), from H ₂ N(CH ₂) ₃ Si(OEt) ₃ (V) and a Schiff base prep'd. from I, III, and IV, or from similar compds. Thus, I 44.4, II 39.2, and Sn(II) octoate 0.1 g were heated at 95.degree. for 5 h and treated during 2.5 h				

with 54 g ketimine prepd. from III and IV to prep. a coupling agent which was added (1%) to a PVC plastisol. The plastisol gave joint strength 365 N/mm2 in the bonding of Al, compared with 196 N/mm2 using V as the coupling agent.

- ST PVC plastisol adhesive coupling agent; azomethine silane coupler PVC adhesive; aluminum adhesive PVC plastisol
- IT Adhesives
(PVC plastisols, for aluminum, coupling agents for, azomethine deriv.-silane reaction products as)
- IT Coupling agents
(azomethine compd.-silane deriv. reaction products, for PVC plastisol adhesives for aluminum)
- IT Schiff bases
RL: USES (Uses)
(reaction products with silanes, coupling agents, for PVC plastisol adhesives for aluminum)
- IT 7429-90-5, uses and miscellaneous
RL: USES (Uses)
(adhesives for, PVC plastisols as, coupling agents for)
- IT 78-84-2D, reaction products with amines and silanes 100-46-9D, reaction products with ketones and silanes 108-10-1D, reaction products with amines and silanes 111-40-0D, reactions products with ketones and silanes 112-24-3D, reaction products with ketones and silanes 919-30-2D, reaction products with Schiff bases 1675-54-3D, reaction products with Schiff bases and silanes 2530-83-8D, reaction products with Schiff bases 2855-13-2D, reaction products with isobutyraldehyde and silane 4098-71-9D, reaction products with Schiff bases and silanes 4420-74-0D, reaction products with Schiff bases 7803-62-5D, amino derivs., reaction products with Schiff bases
RL: USES (Uses)
(coupling agents, for PVC plastisol adhesives for aluminum)
- IT 117-81-7
RL: MOA (Modifier or additive use); USES (Uses)
(plasticizers, PVC adhesives contg., coupling agents for)
- IT 9002-86-2
RL: USES (Uses)
(plastisol adhesives, coupling agents for, compds. contg. azomethine and silane groups as)

L27 ANSWER 36 OF 36 CA COPYRIGHT 2003 ACS

AN 78:112386 CA

TI Molten contact adhesive

IN Krieger, Bernhard; Bolze, Manfred; Drawert, Manfred

PA Schering A.-G.

SO Ger. Offen., 16 pp.

CODEN: GWXXBX

DT Patent

LA German

IC C09J

CC 37-3 (Plastics Fabrication and Uses)

FAN. CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 2118796	A	19721102	DE 1971-2118796	19710417
	US 3792002	A	19740212	US 1972-243423	19720412
	IT 951349	A	19730630	IT 1972-23067	19720413
	FR 2133754	A5	19721201	FR 1972-13217	19720414
	FR 2133754	B3	19750620		
	AT 314709	B	19740425	AT 1972-3274	19720414
	BE 782208	A1	19721017	BE 1972-116405	19720417
	NL 7205157	A	19721019	NL 1972-5157	19720417
PRAI	DE 1971-2118796		19710417		

AB Hot-melt adhesives having improved heat resistance and tack contain dimer acid-polyether diamine polyamides, tackifiers, carboxyl-contg. polyamides, and optionally, ethylene-vinyl acetate polymer [24937-78-8] and silane

deriv. couplers. Thus, mixing 100 g. adipic acid [124-04-9]-dimer acid-4,9-dioxadodecane-1,12-diamine [38146-08-6]-ethylenediamine [107-15-3] polymer and 100 g hydrogenated rosin acid (tackifier) at 200.deg. gives an adhesive having softening point 60.deg., viscosity 30 p at 120.deg., and adhesive strength 4.7 kg/3 cm.

ST adhesive hot melt; polyamide adhesive; dimer acid polyamide; rosin tackifier adhesive; heat resistance adhesive

IT Tackifiers

(amides and rosin acids, for polyamide adhesives)

IT Fatty acids, polymers

RL: USES (Uses)

(dimers, polyamides contg., for hot-melt adhesives)

IT Polyamides, uses and miscellaneous

RL: USES (Uses)

(fatty acid dimer-based, for hot-melt adhesives)

IT Adhesives

(hot-melt, dimer acid-based polyamides for use in)

IT Resin acids and Rosin acids

RL: USES (Uses)

(tackifiers, for polyamide adhesives)

IT 1,2-Ethanediamine, polymer with fatty acid dimers

Ethanol, 2,2'-iminobis-, polymer with fatty acid dimers

RL: USES (Uses)

(for hot-melt adhesives)

IT Decanedioic acid

Hexanedioic acid

RL: USES (Uses)

(polyamides contg., for hot-melt adhesives)

IT 2530-83-8

RL: USES (Uses)

(couplers, for polyamide adhesives)

IT 24937-78-8

RL: USES (Uses)

(polyamide adhesives contg.)

IT 120-61-6 7300-34-7 31951-46-9

RL: USES (Uses)

(polyamides contg., for hot-melt adhesives)

IT 70-55-3 80-30-8 88-19-7 117-81-7 5153-25-3 37361-17-4

RL: USES (Uses)

(tackifiers, for polyamide adhesives)

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COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

93.64

269.58

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

ENTRY

SESSION

CA SUBSCRIBER PRICE

-22.32

-31.62

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LOGINID:sssptau156cxh

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TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * Welcome to STN International * * * * *

NEWS	1		Web Page URLs for STN Seminar Schedule - N. America
NEWS	2	Apr 08	"Ask CAS" for self-help around the clock
NEWS	3	Apr 09	BEILSTEIN: Reload and Implementation of a New Subject Area
NEWS	4	Apr 09	ZDB will be removed from STN
NEWS	5	Apr 19	US Patent Applications available in IFICDB, IFIPAT, and IFIUDB
NEWS	6	Apr 22	Records from IP.com available in CAPLUS, HCAPLUS, and ZCAPLUS
NEWS	7	Apr 22	BIOSIS Gene Names now available in TOXCENTER
NEWS	8	Apr 22	Federal Research in Progress (FEDRIP) now available
NEWS	9	Jun 03	New e-mail delivery for search results now available
NEWS	10	Jun 10	MEDLINE Reload
NEWS	11	Jun 10	PCTFULL has been reloaded
NEWS	12	Jul 02	FOREGE no longer contains STANDARDS file segment
NEWS	13	Jul 22	USAN to be reloaded July 28, 2002; saved answer sets no longer valid
NEWS	14	Jul 29	Enhanced polymer searching in REGISTRY
NEWS	15	Jul 30	NETFIRST to be removed from STN
NEWS	16	Aug 08	CANCERLIT reload
NEWS	17	Aug 08	PHARMAMarketLetter(PHARMAML) - new on STN
NEWS	18	Aug 08	NTIS has been reloaded and enhanced
NEWS	19	Aug 19	Aquatic Toxicity Information Retrieval (AQUIRE) now available on STN
NEWS	20	Aug 19	IFIPAT, IFICDB, and IFIUDB have been reloaded
NEWS	21	Aug 19	The MEDLINE file segment of TOXCENTER has been reloaded
NEWS	22	Aug 26	Sequence searching in REGISTRY enhanced
NEWS	23	Sep 03	JAPIO has been reloaded and enhanced
NEWS	24	Sep 16	Experimental properties added to the REGISTRY file
NEWS	25	Sep 16	CA Section Thesaurus available in CAPLUS and CA
NEWS	26	Oct 01	CASREACT Enriched with Reactions from 1907 to 1985
NEWS	27	Oct 21	EVENTLINE has been reloaded
NEWS	28	Oct 24	BEILSTEIN adds new search fields
NEWS	29	Oct 24	Nutraceuticals International (NUTRACEUT) now available on STN
NEWS	30	Oct 25	MEDLINE SDI run of October 8, 2002
NEWS	31	Nov 18	DKILIT has been renamed APOLLIT
NEWS	32	Nov 25	More calculated properties added to REGISTRY
NEWS	33	Dec 02	TIBKAT will be removed from STN
NEWS	34	Dec 04	CSA files on STN
NEWS	35	Dec 17	PCTFULL now covers WP/PCT Applications from 1978 to date
NEWS	36	Dec 17	TOXCENTER enhanced with additional content
NEWS	37	Dec 17	Adis Clinical Trials Insight now available on STN
NEWS	38	Dec 30	ISMEC no longer available
NEWS	39	Jan 13	Indexing added to some pre-1967 records in CA/CAPLUS
NEWS	40	Jan 21	NUTRACEUT offering one free connect hour in February 2003
NEWS	41	Jan 21	PHARMAML offering one free connect hour in February 2003
NEWS	42	Jan 29	Simultaneous left and right truncation added to COMPENDEX, ENERGY, INSPEC
NEWS	43	Feb 13	CANCERLIT is no longer being updated
NEWS	44	Feb 24	METADEX enhancements
NEWS	45	Feb 24	PCTGEN now available on STN
NEWS	46	Feb 24	TEMA now available on STN
NEWS	47	Feb 26	NTIS now allows simultaneous left and right truncation
NEWS	48	Feb 26	PCTFULL now contains images
NEWS	49	Mar 04	SDI PACKAGE for monthly delivery of multifile SDI results
NEWS	EXPRESS		January 6 CURRENT WINDOWS VERSION IS V6.01a, CURRENT MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP), AND CURRENT DISCOVER FILE IS DATED 01 OCTOBER 2002
NEWS	HOURS		STN Operating Hours Plus Help Desk Availability
NEWS	INTER		General Internet Information
NEWS	LOGIN		Welcome Banner and News Items
NEWS	PHONE		Direct Dial and Telecommunication Network Access to STN
NEWS	WWW		CAS World Wide Web Site (general information)

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* * * * * STN Columbus * * * * *

FILE 'HOME' ENTERED AT 10:42:42 ON 10 MAR 2003

=> file reg

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.21

0.21

FILE 'REGISTRY' ENTERED AT 10:42:48 ON 10 MAR 2003

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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 9 MAR 2003 HIGHEST RN 497220-90-3

DICTIONARY FILE UPDATES: 9 MAR 2003 HIGHEST RN 497220-90-3

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STN Note 27, Searching Properties in the CAS Registry File, for complete details:

<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=> s 5493-45-8

L1 1 5493-45-8
(5493-45-8/RN)

=> d all

L1 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS

RN 5493-45-8 REGISTRY

CN 1,2-Cyclohexanedicarboxylic acid, bis(oxiranylmethyl) ester (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1,2-Cyclohexanedicarboxylic acid, bis(2,3-epoxypropyl) ester (7CI, 8CI)

CN 1-Propanol, 2,3-epoxy-, 1,2-cyclohexanedicarboxylate (2:1) (8CI)

OTHER NAMES:

CN Bis(2,3-epoxypropyl) 1,2-cyclohexanedicarboxylate

CN Diglycidyl 1,2-cyclohexanedicarboxylate

CN Diglycidyl hexahydrophthalate

CN Hexahydrophthalic acid diglycidyl ester

FS 3D CONCORD

MF C14 H20 O6

CI COM

LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS, CHEMCATS, CHEMLIST, CSCHM,

CSNB, IFICDB, IFIPAT, IFIUDB, MEDLINE, MSDS-OHS, PROMT, RTECS*,
TOXCENTER, USPATFULL

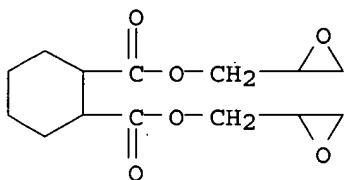
(*File contains numerically searchable property data)

Other Sources: DSL**, EINECS**, TSCA**

(**Enter CHEMLIST File for up-to-date regulatory information)

Ring System Data

Elemental Analysis EA	Elemental Sequence ES	Size of the Rings SZ	Ring System Formula RF	Ring Identifier RID	RID Occurrence Count
C2O	OC2	3	C2O	1.30.1	2
C6	C6	6	C6	46.150.1	1



Calculated Properties (CALC)

PROPERTY (CODE)	VALUE	CONDITION	NOTE
Bioconc. Factor (BCF)	10.7	pH 1	(1) ACD
Bioconc. Factor (BCF)	10.7	pH 4	(1) ACD
Bioconc. Factor (BCF)	10.7	pH 7	(1) ACD
Bioconc. Factor (BCF)	10.7	pH 8	(1) ACD
Bioconc. Factor (BCF)	10.7	pH 10	(1) ACD
Boiling Point (BP)	412.6+/-30.0 deg C	760.0 Torr	(1) ACD
Enthalpy of Vap. (HVP)	66.52+/-3.0 kJ/mol		(1) ACD
Flash Point (FP)	183.3+/-44.3 deg C		(1) ACD
H acceptors (HAC)	6		(1) ACD
H donors (HD)	0		(1) ACD
Koc (KOC)	190	pH 1	(1) ACD
Koc (KOC)	190	pH 4	(1) ACD
Koc (KOC)	190	pH 7	(1) ACD
Koc (KOC)	190	pH 8	(1) ACD
Koc (KOC)	190	pH 10	(1) ACD
logD (LOGD)	1.66	pH 1	(1) ACD
logD (LOGD)	1.66	pH 4	(1) ACD
logD (LOGD)	1.66	pH 7	(1) ACD
logD (LOGD)	1.66	pH 8	(1) ACD
logD (LOGD)	1.66	pH 10	(1) ACD
logP (LOGP)	1.659+/-0.492		(1) ACD
Molar Solubility (SLB.MOL)	<0.01 mol/L	pH 1	(1) ACD
Molar Solubility (SLB.MOL)	<0.01 mol/L	pH 4	(1) ACD
Molar Solubility (SLB.MOL)	<0.01 mol/L	pH 7	(1) ACD
Molar Solubility (SLB.MOL)	<0.01 mol/L	pH 8	(1) ACD
Molar Solubility (SLB.MOL)	<0.01 mol/L	pH 10	(1) ACD
Molecular Weight (MW)	284.30		(1) ACD
Vapor Pressure (VP)	5.12E-07 Torr	25.0 deg C	(1) ACD

(1) Calculated using Advanced Chemistry Development (ACD) Software Solaris V4.67 ((C) 1994-2003 ACD)

190 REFERENCES IN FILE CA (1962 TO DATE)
39 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
190 REFERENCES IN FILE CAPLUS (1962 TO DATE)
2 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1

AN 138:74507 CA

TI Polyester elastomer resin compositions for blow moldings

IN Furuta, Yoko; Akiba, Kazuteru; Horiuchi, Mamoru

PA Du Pont-Toray Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 17 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM C08L067-02

ICS C08G018-42; C08G063-66; C08K005-13; C08K005-18; C08K005-20;
C08K005-36; C08K005-49; C08L075-04; C08L101-00; C08G059-40

CC 39-9 (Synthetic Elastomers and Natural Rubber)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2003012906	A2	20030115	JP 2002-114869	20020417
PRAI	JP 2001-127866		20010425		

AB Title compns. with melt flow rate .ltoreq.5 g/10 min (ASTM D-1238 under load 2160 g and at a temp. To) and terminal carboxyl group content .ltoreq.50 equiv/ton comprise (A) polyether-polyester block copolymers with melt flow rate .ltoreq.5 g/10 min (ASTM D-1238 under load 2160 g and at a temp. To) obtained by solid polycondensation of polyether-polyester block copolymers (A') comprising high m.p. cryst. segments comprising mainly cryst. arom. polyester units and low m.p. polymer segments comprising mainly aliph. polyether units 100 and (B) epoxy compds. with functionality .gtoreq.2 0.0-10 or (C) isocyanate compds. with functionality .gtoreq.2 0.01-10 parts, where To = R(Tm) + 20 wherein Tm = m.p. of polyester block copolymers A' and R(x) = rounded value of x to 10 unit. Thus, terephthalic acid 419, 1,4-butanediol 409, and Terathane 1400 476 parts were heated at 190-225.degree. for 3 h, 0.75 parts Irganox 1010 was added therein and polymd. at 245.degree. for 2 h 40 min to give a polyether-polyester block copolymer with m.p. 198.degree. and melt flow rate at 220.degree. 18 g/10 min, which was solid-polycondensated at 170.degree.-180.degree. for 20 h to give a polyether-polyester block copolymer with melt flow rate 4.5 g /10 min, 100 parts of which was kneaded with 1 parts hexahydrophthalic acid diglycidyl ester showing Shore D hardness 47, terminal carboxyl group content 32.6 equiv/ton, and good melt viscosity retention stability and giving a bottle with uniform thickness.

ST polyester elastomer resin compn blow molding; terephthalic acid butanediol Terathane block polyether polyester solid polycondensation; polyether polyester block copolymer hexahydrophthalic acid diglycidyl ester compn

IT Molded plastics, properties

RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)

(blow; prepn. of polyester elastomer resin compns. comprising epoxy compds. or isocyanates for blow moldings)

IT Shoes

(boots, flexible; prepn. of polyester elastomer resin compns. comprising epoxy compds. or isocyanates for blow moldings)

IT Polyester rubber

Synthetic rubber, preparation

RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(butanediol-polytetramethylene glycol-terephthalic acid, block; prepn. of polyester elastomer resin compns. comprising epoxy compds. or isocyanates for blow moldings)

- IT Bottles
(plastic; prepn. of polyester elastomer resin compns. comprising epoxy compds. or isocyanates for blow moldings)
- IT Synthetic rubber, preparation
RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(polyester-polyether, block; prepn. of polyester elastomer resin compns. comprising epoxy compds. or isocyanates for blow moldings)
- IT Polyester rubber
RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(polyether-, block; prepn. of polyester elastomer resin compns. comprising epoxy compds. or isocyanates for blow moldings)
- IT Epoxides
Isocyanates
RL: MOA (Modifier or additive use); USES (Uses)
(prepn. of polyester elastomer resin compns. comprising epoxy compds. or isocyanates for blow moldings)
- IT 101-68-8, Diphenylmethane diisocyanate 5493-45-8, Hexahydrophthalic acid diglycidyl ester
RL: MOA (Modifier or additive use); USES (Uses)
(prepn. of polyester elastomer resin compns. comprising epoxy compds. or isocyanates for blow moldings)
- IT 106159-00-6P
RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(rubber; prepn. of polyester elastomer resin compns. comprising epoxy compds. or isocyanates for blow moldings)

REFERENCE 2

AN 137:371260 CA
TI Silica-reinforced rubber compositions of improved processability and storage stability
IN Schaal, Stephane; Coran, Aubert Y.; Mowdood, Syed K.
PA Pirelli Pneumatici S.p.A., Italy
SO U.S., 20 pp., Cont.-in-part of U.S. Ser. No. 514,641, abandoned.
CODEN: USXXAM
DT Patent
LA English
IC ICM C08K003-36
ICS C08K009-06
NCL 524492000
CC 39-9 (Synthetic Elastomers and Natural Rubber)
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6482884	B1	20021119	US 2000-571503	20000515
	WO 2001064782	A1	20010907	WO 2001-US6326	20010228
	W:				
	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW:				
	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	EP 1259565	A1	20021127	EP 2001-913134	20010228

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

BR 2001008839 A 20021217 BR 2001-8839 20010228

PRAI US 2000-514641 20000229

US 2000-571503 20000515

WO 2001-US6326 20010228

AB The disclosure relates to a process for improving the processability, storage stability and/or cure rate of an uncured silica-reinforced rubber compn. where silica comprises the major filler in the reinforced rubber compn., which comprises combining a mixt. comprising rubber, silica and at least one org. compd. having a low mol. wt. and a functional group wherein said functional group is at least an epoxy group, such as an epoxy/ether, epoxy/hydroxyl, epoxy/ester, epoxy/amine, ether/amine, episulfide, episulfide/ether, episulfide/hydroxyl, episulfide/ester functional group located in a terminal or sterically unhindered position in the mol. of said org. compd. where the mol. wt. of said org. compd. having a low mol. wt. is less than 7,000, or the org. compd. comprises an abietyl, styrenated resorcinol formaldehyde, or ester hydroxyl org. compd. having a hydroxyl, ester, and optionally, an ether group, such as an ester diol. Thus, a compn. (A) contg. SBR 100, silica 60, X 50S (bis[3-(triethoxysilyl)propyl] tetrasulfide) 9.6, stearic acid 3, ZnO 2, 6PPD (N-1,3-dimethylbutyl-N'-p-phenylenediamine) 1.5, wax 1, arom. oil 12, N,N-diglycidylaniline (I) 2, S 1.2, N-cyclohexyl-2-benzothiazolesulfenamide 1.8 and DPG 80 (diphenylguanidine) 1.25 parts showed a substantial decrease in curing time compared to a control compn. lacking the I. The Mooney peak and the processability index of A are much lower than that of control compn. This indicates that the addn. of I to the control compn. leads to a significant improvement of the resistance to adverse rheol. changes that occur during storage. It can also be seen that I is much more effective than low mol. wt. glycols such as diethylene glycol di-Et ether or diethylene glycol Et ether acetate for processability after storage.

ST epoxy diglycidylaniline storage stability improver silica reinforced rubber compn

IT Stabilizing agents

Vulcanization accelerators and agents

(additives for silica reinforced rubber compns. of improved processability and storage stability)

IT Styrene-butadiene rubber, properties

RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)

(additives for silica reinforced rubber compns. of improved processability and storage stability)

IT Fatty acids, uses

RL: CAT (Catalyst use); MOA (Modifier or additive use); USES (Uses)

(dimer acids, diglycidyl ester; additives for silica reinforced rubber compns. of improved processability and storage stability)

IT Natural rubber, uses

Soybean oil

RL: CAT (Catalyst use); MOA (Modifier or additive use); USES (Uses)

(epoxidized; additives for silica reinforced rubber compns. of improved processability and storage stability)

IT 111-46-6, Diethylene glycol, uses 1446-61-3, Dehydroabietylamine

2095-06-9, N,N-Diglycidylaniline 2211-94-1, Glycidyl 4-methoxyphenyl ether 2386-87-0, 3,4-Epoxy cyclohexylmethyl 3,4-

epoxycyclohexanecarboxylate 2425-79-8, 1,4-Butanediol diglycidyl ether

2461-15-6, 2-Ethylhexyl glycidyl ether 2461-40-7, Glycidyl butyrate

3146-39-2, exo-2,3-Epoxy norbornane 4016-14-2, Isopropyl glycidyl ether

4436-24-2, (2,3-Epoxypropyl)benzene 5026-74-4,

N,N-Diglycidyl-4-glycidyl oxyaniline 5455-98-1,

N-(2,3-Epoxypropyl)phthalimide 5493-45-8, Diglycidyl 1,2-cyclohexane

dicarboxylate 25068-38-6D, Bisphenol A-epichlorohydrin copolymer,

glycidyl-end-capped 26142-30-3, Polypropylene glycol diglycidyl ether

26447-14-3, Cresyl glycidyl ether 26761-45-5, Glycidyl neodecanoate

37231-63-3, Polyrad 0515A 85721-25-1, 1,2-Epoxy-9-decene 97052-23-8,

Formaldehyde-glycidyl phenyl ether copolymer 175205-96-6, Exx-RD 85
359013-45-9, Penacolate CRL 411

RL: CAT (Catalyst use); MOA (Modifier or additive use); USES (Uses)
(additives for silica reinforced rubber compns. of improved
processability and storage stability)

IT 7631-86-9, Silica, uses

RL: MOA (Modifier or additive use); USES (Uses)
(reinforcement filler; additives for silica reinforced rubber compns.
of improved processability and storage stability)

IT 9003-55-8

RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or
engineered material use); USES (Uses)
(styrene-butadiene rubber, additives for silica reinforced rubber
compns. of improved processability and storage stability)

RE.CNT 48 THERE ARE 48 CITED REFERENCES AVAILABLE FOR THIS RECORD

- (1) Ahmad; US 4519430 A 1985
- (2) Anon; DE 2816066 1978 CAPLUS
- (3) Anon; JP 57137333 A2 1982 CAPLUS
- (4) Anon; JP 61287802 A2 1986 CAPLUS
- (5) Anon; JP 61287945 A2 1986 CAPLUS
- (6) Anon; RO 93933 B1 1988 CAPLUS
- (7) Anon; SU 1454817 A1 1989 CAPLUS
- (8) Anon; BR 9101132 1991 CAPLUS
- (9) Anon; EP 91401188 1991
- (10) Anon; JP 92-234836 1992 CAPLUS
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- (13) Anon; EP 94114012 1994
- (14) Anon; EP 94890181 1994
- (15) Anon; JP 07082417 A2 1995 CAPLUS
- (16) Anon; EP 95106428 1995
- (17) Anon; JP 96-119689 1996 CAPLUS
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- (26) Anon; DE 10031348 A1 2001 CAPLUS
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- (28) Durairaj; US 5021522 A 1991 CAPLUS
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- (30) Edwards; US 4357432 A 1982 CAPLUS
- (31) Gorce; US 5665812 A 1997 CAPLUS
- (32) Hashim; J Sol-Gel Sci Technol 1995, V5(3), P211 CAPLUS
- (33) Hellermann; US 5905112 A 1999 CAPLUS
- (34) Hood; US 5049641 A 1991 CAPLUS
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- (40) Sandstrom; US 5489628 A 1996 CAPLUS
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- (42) Sandstrom; US 5885389 A 1999 CAPLUS
- (43) Scriver; US 5219944 A 1993 CAPLUS
- (44) Segatta; US 5396940 A 1995 CAPLUS
- (45) Thurn; US 3873489 A 1975 CAPLUS
- (46) Wang; Xiangjiao Gongye 1995, V42(6), P323 CAPLUS
- (47) Wolff; US 4229333 A 1980 CAPLUS
- (48) Young; US 5063268 A 1991 CAPLUS

AN 137:239720 CA
 TI One-component photocurable resist composition for electronic parts
 IN Hiwasa, Nobu
 PA Otex K. K., Japan
 SO Jpn. Kokai Tokkyo Koho, 9 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 IC ICM C08G059-72
 ICS C09K003-00
 CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other
 Reprographic Processes)
 Section cross-reference(s): 37, 76

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2002256063	A2	20020911	JP 2001-55168	20010228
PRAI	JP 2001-55168		20010228		

AB The compn. comprises (a) cation-polymerizable org. substances of methylol compds., ethylenically unsatd. compds., and/or heterocyclic compds. 0.1-95, (b) latent photopolymn. initiators of cryst. ion-assocn. substances represented by $[[C5(R1)_n]2mMm]1+[[B(R2)4]-]1$ [M = Fe; C5 = cyclopentadienyl; R1 = electron-donating alkyl group bonded to C of C5; n = 5; m = 1 = 1; R2 = (halogenated) aryl or halogenated alkyl ligand coordinated to B atom; 4 of R2 have same identity] 0.01-10, and (c) sensitizers 0.1-10%. The compn. may contain 0.5-90% inorg. fillers. The compn. is used for patterning resists, solder resists, plating resists, hole-embedding inks and resists, and conductive inks.

ST photocurable resist cation polymerizable org substance; ion assocn substance latent photopolymn initiator resist; sensitizer latent photopolymn initiator one component resist; methylol cation polymerizable photoresist elec part; unsatd compd cation polymerizable photoresist elec part; heterocyclic compd cation polymerizable photoresist elec part

IT Ethers, uses
 RL: TEM (Technical or engineered material use); USES (Uses)
 (cyclic; one-component photoresist compn. contg. cation-polymerizable substances, latent initiators, and sensitizers for electronic parts)

IT Inks
 (elec. conductive; one-component photoresist compn. contg. cation-polymerizable substances, latent initiators, and sensitizers for electronic parts)

IT Electric conductors
 (inks; one-component photoresist compn. contg. cation-polymerizable substances, latent initiators, and sensitizers for electronic parts)

IT Photoresists
 Printed circuit boards
 Solder resists
 (one-component photoresist compn. contg. cation-polymerizable substances, latent initiators, and sensitizers for electronic parts)

IT Cyclosiloxanes
 Epoxides
 Epoxy resins, uses
 Lactams
 RL: TEM (Technical or engineered material use); USES (Uses)
 (one-component photoresist compn. contg. cation-polymerizable substances, latent initiators, and sensitizers for electronic parts)

IT Polymerization catalysts
 (photopolymn., latent; one-component photoresist compn. contg. cation-polymerizable substances, latent initiators, and sensitizers for electronic parts)

IT 1344-28-1, Alumina, uses
 RL: TEM (Technical or engineered material use); USES (Uses)
 (Admafine AO 802, filler; one-component photoresist compn. contg. cation-polymerizable substances, latent initiators, and sensitizers for

electronic parts)

IT 141-78-6, Acetidin, uses
 RL: TEM (Technical or engineered material use); USES (Uses)
 (acetidin; one-component photoresist compn. contg. cation-polymerizable substances, latent initiators, and sensitizers for electronic parts)

IT 471-34-1, Calcium carbonate, uses 7631-86-9, SO-E2, uses
 RL: TEM (Technical or engineered material use); USES (Uses)
 (filler; one-component photoresist compn. contg. cation-polymerizable substances, latent initiators, and sensitizers for electronic parts)

IT 220517-46-4
 RL: CAT (Catalyst use); USES (Uses)
 (one-component photoresist compn. contg. cation-polymerizable substances, latent initiators, and sensitizers for electronic parts)

IT 56-81-5D, Glycerin, polyglycidyl ether 95-96-5, Lactide 96-08-2, Limonene dioxide 109-99-9, Tetrahydrofuran, uses 110-88-3, Trioxane, uses 122-60-1, Phenyl glycidyl ether 123-91-1, Dioxane, uses 151-56-4, Aziridine, uses 286-20-4, Cyclohexene oxide 503-30-0, Oxetane 592-90-5, Oxepane 646-06-0, Dioxolane 930-22-3 1072-43-1, Propylene sulfide 2238-07-5, Diglycidyl ether 2386-90-5, Bis(2,3-epoxycyclopentyl) ether 2426-08-6, Butyl glycidyl ether 2451-62-9, Triglycidyl isocyanurate 4206-61-5, Diethylene glycol diglycidyl ether 5493-45-8 6303-21-5D, Phosphinic acid, esters 10580-65-1, Nonyl glycidyl ether 13410-52-1 13561-08-5, 2,6-Diglycidyl phenylglycidyl ether 13598-36-2D, Phosphonic acid, esters 16096-31-4, 1,6-Hexanediol diglycidyl ether 17557-23-2, Neopentyl glycol diglycidyl ether 18425-64-4, Trimethylolpropane diglycidyl ether 26142-30-3, Polypropylene glycol diglycidyl ether 26283-70-5, Epikote YL 6663 26403-72-5, Polyethylene glycol diglycidyl ether 26447-14-3, Cresyl glycidyl ether 28768-32-3 30424-08-9 30969-75-6, Oxazoline 58421-5 5-9, Epiclon 830S 65992-66-7, 1,3-Bis(N,N-diglycidylaminomethyl)cyclohexane 92308-50-4, RE 305 172416-00-1, Aron Oxetane OXT 121
 RL: TEM (Technical or engineered material use); USES (Uses)
 (one-component photoresist compn. contg. cation-polymerizable substances, latent initiators, and sensitizers for electronic parts)

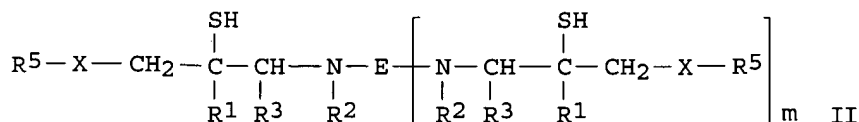
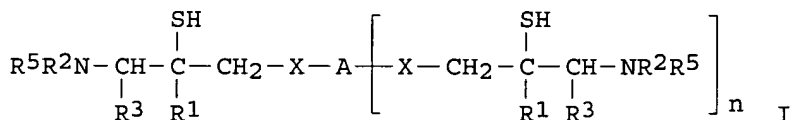
IT 56-55-3, 1,2-Benzoanthracene 81-64-1, Quinizarin 82-34-8, 1-Nitroanthraquinone 84-11-7, 9,10-Phenanthrenedione 84-51-5, 2-Ethylantraquinone 84-54-8, 2-Methylantraquinone 84-65-1, Anthraquinone 85-52-9, o-Benzoylbenzoic acid 90-44-8, Anthrone 90-47-1, Xanthone 90-96-0, 4,4'-Dimethoxybenzophenone 92-91-1 93-04-9, 2-Methoxynaphthalene 98-86-2, Acetophenone, uses 98-86-2D, Acetophenone, dimethoxy deriv 100-06-1 117-80-6, 2,3-Dichloro-1,4-naphthoquinone 119-61-9, Benzophenone, uses 120-12-7, Anthracene, uses 131-09-9, 2-Chloroanthraquinone 131-58-8, 2-Methylbenzophenone 134-81-6, Benzil 134-84-9, 4-Methylbenzophenone 256-81-5, 5H-Dibenzo[a,d]cycloheptene 492-22-8, Thioxanthone 527-61-7, 2,6-Dimethyl-1,4-benzoquinone 574-09-4, 2-Ethoxy-2-phenylacetophenone 605-94-7, 2,3-Dimethoxy-5-methyl-1,4-benzoquinone 606-28-0, Methyl o-benzoylbenzoate 611-94-9, 4-Methoxybenzophenone 611-99-4, 4,4'-Dihydroxybenzophenone 615-93-0, 2,5-Dichloro-p-benzoquinone 643-65-2, 3-Methylbenzophenone 829-20-9 1137-42-4, 4-Hydroxybenzophenone 1201-38-3 1210-12-4, 9-Cyanoanthracene 1210-35-1, Dibenzosuberone 1217-45-4, 9,10-Dicyanoanthracene 1676-63-7 2040-04-2 2128-93-0, 4-Phenylbenzophenone 2498-66-0, 1,2-Benzanthraquinone 2571-39-3, 3,4-Dimethylbenzophenone 2880-58-2 3524-62-7, Benzoin methyl ether 4044-60-4, 2,5-Dimethylbenzophenone 6175-45-7, Diethoxyacetophenone 6652-28-4, Benzoin isopropyl ether 10354-00-4, Dibenzosuberone 10373-78-1, Camphorquinone 13020-57-0, 3-Hydroxybenzophenone 15774-82-0, 2-Methylthioxanthone 17214-11-8 25620-59-1, Aminoanthraquinone 26708-04-3, 2-Ethyl-9,10-dimethoxyanthracene 27938-76-7, Hydroxyanthraquinone 30587-18-9, Anisoin 30637-95-7, Anthraquinonesulfonic acid 41295-28-7, 3,3'-Dimethyl-4-methoxybenzophenone 75081-21-9, Isopropylthioxanthone 76293-13-5, 2,4-Dimethylthioxanthone 79044-56-7 82799-44-8, 2,4-Diethylthioxanthone 83846-85-9, 4-Benzoyl-4'-methyl-diphenyl sulfide 182683-80-3 457652-97-0

RL: TEM (Technical or engineered material use); USES (Uses)
 (sensitizer; one-component photoresist compn. contg.
 cation-polymerizable substances, latent initiators, and sensitizers for
 electronic parts)

REFERENCE 4

AN 137:141921 CA
 TI Epoxy resin-based gel coat composition with excellent weather resistance
 and ultraviolet resistance
 IN Muller, Andre; Frischinger, Isabelle
 PA Vantico Ag, Switz.
 SO PCT Int. Appl., 16 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 IC ICM C08L063-00
 CC 42-9 (Coatings, Inks, and Related Products)
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002060989	A2	20020808	WO 2002-EP239	20020112
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
PRAI	CH 2001-155		20010129		
GI					



AB Title compn. comprises (a) an epoxy-urethane, (b) an aliph. or cycloaliph. epoxy resin other than (a), and (c) a compd. of formula (I) or (II). The A in formula I is an (n + 1)-valent aliph. or cycloaliph. radical and n is an integer from 0 to 5. The E in formula II is an (m + 1)-valent aliph. or cycloaliph. radical and m is an integer from 0 to 3. The X in formulas I and II is -O-, -COO- or -CHR4-; R1 and R2 independently represent H or Me; R3 is H; R5 is a monovalent aliph. or cycloaliph. radical, or when X is -CHR4-, R3 and R4 together form an ethylene group. Thus, a gel coating compn. comprises resin components contg. isophorone diisocyanate-trimethylolpropane diglycidyl ether adduct 80 and trimethylolpropane triglycidyl ether copolymer 20 parts, and hardeners including 2,4,6-thioalkylamine 52, tris[(3-dimethylaminopropyl)aminomethyl]phenol 2, and isophoronediamine 6 parts.

ST epoxy resin polyurethane gel coating thioalkylamine hardener
 IT Thiols (organic), uses

RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)
 (amino; prepn. of thioalkylamine hardener for weather- resistant epoxy resin polyurethane gel coats)

IT Polyurethanes, uses
 RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
 (epoxy; manuf. of weather-, and UV- resistant epoxy resin polyurethane gel coats)

IT Coating materials
 (gel coats; manuf. of weather-, and UV- resistant epoxy resin polyurethane gel coats)

IT Epoxy resins, uses
 RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
 (polyurethane-; manuf. of weather-, and UV- resistant epoxy resin polyurethane gel coats)

IT Heterocyclic compounds
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (sulfur, intermediate; prepn. of thioalkylamine hardener for weather-resistant epoxy resin polyurethane gel coats)

IT Amines, uses
 RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)
 (thiol; prepn. of thioalkylamine hardener for weather- resistant epoxy resin polyurethane gel coats)

IT Crosslinking agents
 (weather- resistant epoxy resin polyurethane gel coat compn. contg.)

IT Epoxy resins, uses
 RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
 (weather- resistant epoxy resin polyurethane gel coat compn. contg.)

IT 444718-66-5P
 RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (manuf. of weather-, and UV- resistant epoxy resin polyurethane gel coats)

IT 444718-65-4P
 RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)
 (prepn. of thioalkylamine hardener for weather- resistant epoxy resin polyurethane gel coats)

IT 109-73-9, n-Butylamine, reactions 14228-73-0D,
 1,4-Bis(hydroxymethyl)cyclohexane diglycidyl ether, reaction products with thiourea or ammonium thiocyanate
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (starting material; prepn. of thioalkylamine hardener for weather-resistant epoxy resin polyurethane gel coats)

IT 2386-87-0, 3,4-Epoxycyclohexylmethyl 3',4'-epoxycyclohexanecarboxylate
 2855-13-2, Isophoronediamine 3126-63-4, Pentaerythritol tetraglycidyl ether 3454-29-3, Trimethylolpropane triglycidyl ether 4098-71-9D,
 Isophorone diisocyanate, reaction products with hydroxyl-contg. polyglycidyl compds. 5124-30-1D, 4,4'-Dicyclohexylmethane diisocyanate, reaction products with hydroxyl-contg. polyglycidyl compds. 5493-45-8, Hexahydrophthalic acid diglycidyl ester 13236-00-5D, Pentaerythritol triglycidyl ether, reaction products with polyisocyanates 14228-73-0, 1,4-Bis(hydroxymethyl)cyclohexane diglycidyl ether 18425-64-4D, Trimethylolpropane diglycidyl ether, reaction products with polyisocyanates 27043-36-3D, Glycerol diglycidyl ether, reaction products with polyisocyanates 53823-29-3D, Cyclohexane diisocyanate, reaction products with hydroxyl-contg. polyglycidyl compds. 225795-35-7
 323580-04-7, Isophorone diisocyanate-trimethylolpropane diglycidyl ether adduct
 RL: MOA (Modifier or additive use); USES (Uses)

REFERENCE 5

AN 137:21505 CA
 TI Photochromic naphthopyran imbibition compositions containing kinetic enhancing additives, manufacturing process and photochromic articles thereof
 IN Misura, Michael S.; Kumar, Anil
 PA PPG Industries Ohio, Inc., USA
 SO PCT Int. Appl., 65 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 IC ICM C08K005-00
 CC 41-11 (Dyes, Organic Pigments, Fluorescent Brighteners, and Photographic Sensitizers).
 Section cross-reference(s): 63, 73, 74

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002044258	A2	20020606	WO 2001-US44925	20011115
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	US 6433043	B1	20020813	US 2000-724145	20001128
	AU 2002027053	A5	20020611	AU 2002-27053	20011115
PRAI	US 2000-724145		20001128		
	WO 2001-US44925		20011115		
AB	An org. photochromic imbibition compn. with improved kinetic performance comprises org. photochromic compd.(s) and optionally carrier, UV light stabilizer(s), UV light absorber(s), antioxidant(s), rheol. control agent(s) and/or leveling agent(s), wherein the kinetic improvement comprises a photochromic performance improving amt. of kinetic enhancing additive as measured in the Photochromic Performance Test. Thus, a compn. comprises 2-ethoxy Et ether, tetrahydrofurfuryl alc., N-Me pyrrolidone, polyethylene glycol diglycidyl ether, hydroxypropyl cellulose, silica, Sanduvor 3056 UV, Irganox 3114, blue naphtho[1,2-b]pyran, and yellow naphtho[1,2-b]pyran.				
ST	photochromic naphthopyran imbibition kinetic enhancing soft contact lens				
IT	Acrylic polymers, uses				
	RL: TEM (Technical or engineered material use); USES (Uses) (C1-C12 alkyl methacrylate; manuf. of photochromic naphthopyran imbibition compns. contg. kinetic enhancing additives)				
IT	Absorbents (UV light; manuf. of photochromic naphthopyran imbibition compns. contg. kinetic enhancing additives)				
IT	Antioxidants (UV; manuf. of photochromic naphthopyran imbibition compns. contg. kinetic enhancing additives)				
IT	Polyoxyalkylenes, uses				
	RL: TEM (Technical or engineered material use); USES (Uses) (dimethacrylates; manuf. of photochromic naphthopyran imbibition compns. contg. kinetic enhancing additives)				
IT	Photochromic materials (dyes; manuf. of photochromic naphthopyran imbibition compns. contg. kinetic enhancing additives)				
IT	Polyoxyalkylenes, uses				
	RL: MOA (Modifier or additive use); USES (Uses)				

(kinetic enhancing additives; manuf. of photochromic naphthopyran imbibition compns. contg. kinetic enhancing additives)

IT Leveling agents
 Photochromism
 Plasticizers
 (manuf. of photochromic naphthopyran imbibition compns. contg. kinetic enhancing additives)

IT Epoxy resins, properties
 RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
 (manuf. of photochromic naphthopyran imbibition compns. contg. kinetic enhancing additives)

IT Polycarbonates, uses
 Polyesters, uses
 Polyurethanes, uses
 Polyvinyl butyrals
 RL: TEM (Technical or engineered material use); USES (Uses)
 (manuf. of photochromic naphthopyran imbibition compns. contg. kinetic enhancing additives)

IT Polyesters, uses
 RL: TEM (Technical or engineered material use); USES (Uses)
 (org. polymer host materials; manuf. of photochromic naphthopyran imbibition compns. contg. kinetic enhancing additives)

IT Spiro compounds
 RL: MOA (Modifier or additive use); USES (Uses)
 (oxazines, photochromic compd.; manuf. of photochromic naphthopyran imbibition compns. contg. kinetic enhancing additives)

IT Dyes
 (photochromic; manuf. of photochromic naphthopyran imbibition compns. contg. kinetic enhancing additives)

IT Ethers, uses
 Phosphates, uses
 Sulfonamides
 RL: MOA (Modifier or additive use); USES (Uses)
 (plasticizer; manuf. of photochromic naphthopyran imbibition compns. contg. kinetic enhancing additives)

IT Polyurethanes, uses
 RL: TEM (Technical or engineered material use); USES (Uses)
 (polyurea-; manuf. of photochromic naphthopyran imbibition compns. contg. kinetic enhancing additives)

IT Polyureas
 RL: TEM (Technical or engineered material use); USES (Uses)
 (polyurethane-; manuf. of photochromic naphthopyran imbibition compns. contg. kinetic enhancing additives)

IT Spiro compounds
 RL: MOA (Modifier or additive use); USES (Uses)
 (pyrans, photochromic compd.; manuf. of photochromic naphthopyran imbibition compns. contg. kinetic enhancing additives)

IT Contact lenses
 (soft; manuf. of photochromic naphthopyran imbibition compns. contg. kinetic enhancing additives)

IT Heterocyclic compounds
 RL: MOA (Modifier or additive use); USES (Uses)
 (spiropyran, photochromic compd.; manuf. of photochromic naphthopyran imbibition compns. contg. kinetic enhancing additives)

IT Polyurethanes, uses
 RL: TEM (Technical or engineered material use); USES (Uses)
 (thio-; manuf. of photochromic naphthopyran imbibition compns. contg. kinetic enhancing additives)

IT 5768-89-8D, Fulgide, derivs.
 RL: MOA (Modifier or additive use); USES (Uses)
 (Fulgides, photochromic compd.; manuf. of photochromic naphthopyran imbibition compns. contg. kinetic enhancing additives)

IT 25190-06-1
 RL: MOA (Modifier or additive use); USES (Uses)

(Terathane 650, kinetic enhancing additives; manuf. of photochromic naphthopyran imbibition compns. contg. kinetic enhancing additives)

IT 9004-64-2, Hydroxypropyl cellulose 63843-89-0, Tinuvin 144 106917-31-1, Sanduvor 3058
 RL: MOA (Modifier or additive use); USES (Uses)
 (UV stabilizer; manuf. of photochromic naphthopyran imbibition compns. contg. kinetic enhancing additives)

IT 27676-62-6, IRGANOX 3114 106917-30-0, SANDUVOR 3056
 RL: MOA (Modifier or additive use); USES (Uses)
 (antioxidant; manuf. of photochromic naphthopyran imbibition compns. contg. kinetic enhancing additives)

IT 64-17-5, Ethanol, uses 67-56-1, Methanol, uses 67-64-1, Acetone, uses 71-43-2, Benzene, uses 78-93-3, Methyl ethyl ketone, uses 97-99-4, Tetrahydrofurfuryl alcohol 107-21-1, Ethylene glycol, uses 108-88-3, Toluene, uses 109-99-9, Tetrahydrofuran, uses 110-82-7, Cyclohexane, uses 111-96-6, 2-Methoxyethyl ether 112-36-7, 2-Ethoxyethyl ether 141-78-6, Ethyl acetate, uses 554-12-1, Methyl propionate 591-24-2, 3-Methyl cyclohexanone 872-50-4, n-Methyl pyrrolidone, uses 1330-20-7, Xylene, uses 7732-18-5, Water, uses 9002-86-2, Polyvinyl chloride 9003-20-7, Polyvinyl acetate 9003-39-8, Poly(vinyl pyrrolidone) 9004-34-6, Cellulose, uses 9004-36-8, Cellulose acetate butyrate 25035-84-1, Polyvinyl propionate
 RL: NUU (Other use, unclassified); USES (Uses)
 (carrier; manuf. of photochromic naphthopyran imbibition compns. contg. kinetic enhancing additives)

IT 50-70-4D, Sorbitol, polyglycidyl ethers 77-99-6, Trimethylolpropane 122-60-1, Phenyl glycidyl ether 2224-15-9 2425-01-6, Hydroquinone diglycidyl ether 2426-08-6, Butyl glycidyl ether 3454-29-3, Trimethylolpropane triglycidyl ether 5026-74-4, N,N-Diglycidyl-4-glycidyloxyaniline 5455-98-1 5493-45-8, Diglycidyl 1,2-cyclohexanedicarboxylate 7195-44-0, Diglycidyl terephthalate 9004-81-3, Poly(ethylene glycol)monolaurate 9004-86-8, Benzoflex P-200 13236-02-7, Glycerol polyglycidyl ether 16096-31-4, 1,6-Hexane diol diglycidyl ether 17557-23-2, Neopentyl glycol diglycidyl ether 21544-03-6, Diglycidyl 1,2,3,6-tetrahydrophthalate 24979-97-3, Polytetrahydrofuran 24979-97-3D, Polytetrahydrofuran, diol derivs. 24980-41-4D, Polycaprolactone, diol derivs. 25190-06-1D, diol derivs. 25248-42-4D, Polycaprolactone, sru, diol derivs. 25322-68-3, Poly(ethylene glycol) 26142-30-3, Poly(propylene glycol)diglycidyl ether 26403-72-5, Poly(ethylene glycol)diglycidyl ether 37237-76-6 37353-75-6, Bisphenol A propylene oxide adduct 37353-75-6D, Bisphenol A propylene oxide adduct, hydrogenated 59113-36-9D, Diglycerol, polyglycidyl ethers 61762-87-6, N,N-Diglycidyltoluidine 99264-56-9, Propylene glycol glycidyl ether
 RL: MOA (Modifier or additive use); USES (Uses)
 (kinetic enhancing additives; manuf. of photochromic naphthopyran imbibition compns. contg. kinetic enhancing additives)

IT 5124-30-1, Dicyclohexylmethane-4,4'-diisocyanate 79103-62-1, DESMODUR W
 RL: MOA (Modifier or additive use); USES (Uses)
 (manuf. of photochromic naphthopyran imbibition compns. contg. kinetic enhancing additives)

IT 9002-85-1, Poly(vinylidene chloride) 9003-53-6, Polystyrene 9003-54-7, Styrene-acrylonitrile copolymer 9004-35-7, Cellulose acetate 9004-39-1, Cellulose acetate propionate 9012-09-3, Cellulose triacetate 25014-31-7, Poly(.alpha.-methylstyrene) 25034-86-0, Styrene-methyl methacrylate copolymer 25038-59-9, Poly(ethylene terephthalate), uses
 RL: TEM (Technical or engineered material use); USES (Uses)
 (org. polymer host materials; manuf. of photochromic naphthopyran imbibition compns. contg. kinetic enhancing additives)

IT 254-04-6, Benzopyran 28596-00-1D, Fulgimide, derivs.
 RL: MOA (Modifier or additive use); USES (Uses)
 (photochromic compd.; manuf. of photochromic naphthopyran imbibition compns. contg. kinetic enhancing additives)

AN 135:228056 CA
 TI Silica reinforced rubber compositions comprising epoxy group-containing compounds for improved processability and storage stability
 IN Schaal, Stephane; Coran, Aubert Y.; Mowdood, Syed K.
 PA Pirelli Pneumatici S.p.A., Italy
 SO PCT Int. Appl., 76 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 IC ICM C08L021-00
 ICS C08K005-15; C08K005-45; B60C001-00
 CC 39-9 (Synthetic Elastomers and Natural Rubber)
 FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001064782	A1	20010907	WO 2001-US6326	20010228
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	US 6482884	B1	20021119	US 2000-571503	20000515
	EP 1259565	A1	20021127	EP 2001-913134	20010228
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	BR 2001008839	A	20021217	BR 2001-8839	20010228
PRAI	US 2000-514641		20000229		
	US 2000-571503		20000515		
	WO 2001-US6326		20010228		
AB	The disclosure relates to a process for improving the processability, storage stability and/or cure rate of an uncured silica reinforced rubber compn. where silica comprises the major filler in the reinforced rubber compn., which comprises combining a mixt. comprising, rubber, silica and at least one org. compd. having a low mol. wt. and a functional group wherein said functional group is at least an epoxy group, such as an epoxy/ether, epoxy/hydroxyl, epoxy/ester, epoxy/amine, ether/amine, episulfide, episulfide/ether, episulfide/hydroxyl, episulfide/ester functional group located in a terminal or sterically unhindered position in the mol. of said org. compd. where the mol. wt. of said org. compd. having a low mol. wt. is less than 7,000. Thus, a compn. comprising soln. SBR 10, silica 60, TESPT X50S 9.6, stearic acid 3, zinc oxide 2, 6PPD 1.5, wax 1, arom. oil 12, and N,N-diglycidylaniline 2 parts was vulcanized with a curing system (comprising sulfur 1.2, CBS 1.8, and diphenylguanidine, DPG 80, 1.25 parts), and showed cure time 52 min, elongation 342.2, stress at break 18.42 MPa, Mooney peak 69.5 kPa, and processability index 0.58, compared to 65, 356.25, 19.53, 119.0, and 1.0, resp., for a similar compn. without N,N-diglycidylaniline.				
ST	rubber processing curing enhancer epoxy group contg compd; silica filled rubber compn epoxy org modifier				
IT	Fatty acids, uses				
	RL: MOA (Modifier or additive use); USES (Uses) (dimer acids, diglycidyl esters; silica reinforced rubber compns. comprising epoxy group-contg. compds. for improved processability and storage stability)				
IT	Castor oil				
	RL: MOA (Modifier or additive use); USES (Uses) (glycidyl ether deriv.; silica reinforced rubber compns. comprising epoxy group-contg. compds. for improved processability and storage stability)				
IT	Silanes				

RL: MOA (Modifier or additive use); USES (Uses)
 (organosilanes; silica reinforced rubber compns. comprising epoxy group-contg. compds. for improved processability and storage stability)

IT Coupling agents
 (silica reinforced rubber compns. comprising epoxy group-contg. compds. for improved processability and storage stability)

IT Epoxy resins, uses
 RL: MOA (Modifier or additive use); USES (Uses)
 (silica reinforced rubber compns. comprising epoxy group-contg. compds. for improved processability and storage stability)

IT Styrene-butadiene rubber, uses
 RL: POF (Polymer in formulation); USES (Uses)
 (silica reinforced rubber compns. comprising epoxy group-contg. compds. for improved processability and storage stability)

IT 40372-72-3, Bis(3-triethoxysilylpropyl) tetrasulfide
 RL: MOA (Modifier or additive use); USES (Uses)
 (coupling agent; silica reinforced rubber compns. comprising epoxy group-contg. compds. for improved processability and storage stability)

IT 122-60-1, Phenyl glycidyl ether 2095-06-9, N,N-Diglycidylaniline
 2211-94-1, Glycidyl 4-methoxyphenyl ether 2386-87-0,
 3,4-Epoxy cyclohexylmethyl-3,4-epoxycyclohexanecarboxylate 2425-79-8,
 1,4-Butanediol diglycidyl ether 2426-08-6, Butyl glycidyl ether
 2461-15-6, 2-Ethylhexyl glycidyl ether 2461-40-7, Glycidyl butyrate
 3146-39-2, exo-2,3-Epoxy norbornane 4016-14-2, Isopropyl glycidyl ether
 4436-24-2, (2,3-Epoxypropyl)benzene 5026-74-4,
 N,N-Diglycidyl-4-glycidyl oxyaniline 5455-98-1,
 (2,3-Epoxypropyl)phthalimide 5493-45-8, Diglycidyl-1,2-
 Cyclohexanedicarboxylate 7631-86-9, Silica, uses 17557-23-2, Neopentyl
 glycol diglycidyl ether 25068-38-6D, Bisphenol A-epichlorohydrin
 copolymer, glycidyl 4-methoxyphenyl ethers 26142-30-3, Polypropylene
 glycol diglycidyl ether 26447-14-3, Cresyl glycidyl ether 26761-45-5,
 Glycidyl neodecanoate 29756-57-8, Nonylphenyl glycidyl ether 79347-31-
 2, Cyclohexylmethyl 3,4-epoxycyclohexanecarboxylate 85721-25-1,
 1,2-Epoxy-9-decene 97052-23-8, Formaldehyde-phenylglycidyl ether
 copolymer 359013-45-9, Penacolite CRL 411
 RL: MOA (Modifier or additive use); USES (Uses)
 (silica reinforced rubber compns. comprising epoxy group-contg. compds. for improved processability and storage stability)

IT 3101-60-8, p-tert-Butylphenyl glycidyl ether
 RL: POF (Polymer in formulation); USES (Uses)
 (silica reinforced rubber compns. comprising epoxy group-contg. compds. for improved processability and storage stability)

IT 9003-55-8
 RL: POF (Polymer in formulation); USES (Uses)
 (styrene-butadiene rubber, silica reinforced rubber compns. comprising epoxy group-contg. compds. for improved processability and storage stability)

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
 (1) Continental Ag; DE 19700967 A 1998 CAPLUS
 (2) Durairaj, R; US 5945500 A 1999 CAPLUS
 (3) Nichias Corp; EP 0825224 A 1998 CAPLUS
 (4) Yokohama Rubber Co Ltd; DE 10031348 A 2001 CAPLUS

REFERENCE 7

AN 135:227307 CA
 TI Electro-optic properties of CO2 fixed-polymer/nematic LC composite films
 AU Cho, Yeong Hee; Kim, Byung Kyu
 CS Department of Polymer Science and Engineering and Research Institute of
 Industrial Technology, Pusan National University, Pusan, 609-735, S. Korea
 SO Journal of Applied Polymer Science (2001), 81(11), 2744-2753
 CODEN: JAPNAB; ISSN: 0021-8995
 PB John Wiley & Sons, Inc.
 DT Journal
 LA English

CC 35-4 (Chemistry of Synthetic High Polymers)
 Section cross-reference(s): 37, 75

AB Bis(cyclic carbonate) was obtained from the reaction of an epoxide and CO₂ using a quaternary ammonium halide salt catalyst. Cyclic carbonate derivs. were then reacted with amines to obtain quant. poly(hydroxy)urethanes that were reacted with isophorone diisocyanate (IPDI) and end capped with acrylate to form prepolymers. These prepolymers were mixed with reactive diluents and nematic LCs, and subjected to UV cure to form polymer/LC composite films in a transparent cell. Three types of diglycidyl ether [poly(propylene glycol), cyclohexane, bisphenol A], three types of endcapping acrylates [2-hydroxyethyl acrylate (HEA), 2-hydroxypropyl acrylate (HPA), and 2-hydroxyethyl methacrylate (HEMA)], three types of multifunctional diluents [tripropylene glycol diacrylate (TPGDA), trimethylolpropane triacrylate (TMPTA), dipentaerythritol hydroxy penta/hexa acrylate (DPHPA)], and three types of photoinitiators (Irgacure-651, Irgacure-184, Darocure-1173) were incorporated to control the morphol., and hence, the electro-optic properties of the polymer/nematic LC composite films. Poly(propylene glycol) diglycidyl ether segment of polyurethane acrylate (PUA) showed lower viscosity and gave larger domain size resulting in lower threshold (V₁₀) and driving (V₉₀) voltages, together with larger nematic-isotropic transition temp. depression. HEA end-capped PUA gave larger polymer-LC phase sepn. and smaller V₁₀ and V₉₀. TPGDA-based PUA showed the lowest V₁₀ and V₉₀ and the shortest response time. Among the three types of photoinitiators used Irgacure-651 showed the larger LC domain, and smaller V₁₀ and V₉₀.

ST carbon dioxide fixing epoxide cyclic carbonate prepn; amine cyclic carbonate polyhydroxyurethane reaction isophorone diisocyanate; acrylate capped polyurethane curing diacrylate nematic liq crystal; polymer network liq crystal prepn transition driving voltage

IT Polyurethanes, preparation
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
 (acrylates; prepn. and phase morphol. and electro-optical properties of CO₂ fixed-polyurethane acrylate/nematic LC composite films)

IT Nonlinear optical absorption
 (electrooptical; prepn. and phase morphol. and electro-optical properties of CO₂ fixed-polyurethane acrylate/nematic LC composite films)

IT Liquid crystals
 (nematic; prepn. and phase morphol. and electro-optical properties of CO₂ fixed-polyurethane acrylate/nematic LC composite films)

IT Electrooptical absorption
 (nonlinear; prepn. and phase morphol. and electro-optical properties of CO₂ fixed-polyurethane acrylate/nematic LC composite films)

IT Polymerization catalysts
 (photopolymn.; prepn. and phase morphol. and electro-optical properties of CO₂ fixed-polyurethane acrylate/nematic LC composite films)

IT Contact angle
 Electrooptical effect
 Optical transmission
 Phase separation
 Structural phase transition
 UV absorption
 Viscosity
 (prepn. and phase morphol. and electro-optical properties of CO₂ fixed-polyurethane acrylate/nematic LC composite films)

IT Liquid crystals
 (transitions, nematic-isotropic; prepn. and phase morphol. and electro-optical properties of CO₂ fixed-polyurethane acrylate/nematic LC composite films)

IT 85023-51-4DP, reaction product with 6-Amino-1-hexanol for polyurethane/polyacrylate deriv. 111570-03-7DP, reaction product with 6-Amino-1-hexanol for polyurethane/polyacrylate deriv. 124219-32-5DP, Bis[(2-oxo-1,3-dioxolan-4-yl)methyl] 1,2-cyclohexanedicarboxylate, reaction product with 6-Amino-1-hexanol for polyurethane/polyacrylate

deriv.

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(cyclic carbonate, intermediate; prepn. and phase morphol. and
electro-optical properties of CO2 fixed-polyurethane acrylate/nematic
LC composite films)

IT 947-19-3, Irgacure-184 7473-98-5 24650-42-8, Irgacure-651

RL: CAT (Catalyst use); USES (Uses)
(photocrosslinking catalyst; prepn. and phase morphol. and
electro-optical properties of CO2 fixed-polyurethane acrylate/nematic
LC composite films)

IT 358721-65-0, Ro 521

RL: PEP (Physical, engineering or chemical process); PRP (Properties);
PROC (Process)

(prepn. and phase morphol. and electro-optical properties of CO2
fixed-polyurethane acrylate/nematic LC composite films)

IT 88-12-ODP, polymer with polyurethane/polyacrylate deriv. 818-61-1DP,
2-Hydroxyethyl acrylate, polyurethane/polyacrylate deriv. 868-77-9DP,
2-Hydroxyethyl methacrylate, polyurethane/polyacrylate deriv. 999-61-1DP
, 2-Hydroxypropyl acrylate, polyurethane/polyacrylate deriv. 4048-33-3DP
, 6-Amino-1-hexanol, polyurethane/polyacrylate deriv. 4098-71-9DP,
Isophorone diisocyanate, polyurethane/polyacrylate deriv. 15625-89-5DP,
Trimethylolpropane triacrylate, polyurethane/polyacrylate deriv.
42978-66-5DP, Tripropylene glycol diacrylate, polyurethane/polyacrylate
deriv. 60506-81-2DP, polyurethane/polyacrylate deriv.

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and phase morphol. and electro-optical properties of CO2
fixed-polyurethane acrylate/nematic LC composite films)

IT 124-38-9, Carbon dioxide, reactions 1675-54-3, Bisphenol A diglycidyl
ether 5493-45-8, Diglycidyl-1,2-cyclohexanedicarboxylate 26142-30-3,
Poly(propylene glycol)diglycidyl ether

RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. and phase morphol. and electro-optical properties of CO2
fixed-polyurethane acrylate/nematic LC composite films)

RE.CNT 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD

- (1) Bos, P; SID 93 Digest 1993, P877
- (2) Calbo, L; Handbook of Coatings Additives, 2nd ed 1992, V2, P12
- (3) Ding, J; Mol Cryst Liq Cryst 1994, V238, P47 CAPLUS
- (4) Doane, J; Liquid Crystals-Applications and Uses 1990, V1
- (5) Drzaic, P; Liq Cryst 1988, V3, P1543 CAPLUS
- (6) Fujisawa, T; Proc of the 9th Int Display Research Conf 1989
- (7) Hirai, Y; Proc SPIE 1990, V1080, P24
- (8) Kim, B; J Polym Sci Polym Chem 1996, V34, P1095 CAPLUS
- (9) Kim, B; J Polym Sci Polym Phys 1994, V32, P561 CAPLUS
- (10) Kim, B; Mol Cryst Liq Cryst 1995, V261, P605 CAPLUS
- (11) Kim, B; Polymer 1996, V37, P469 CAPLUS
- (12) Kim, B; Polymer 1996, V37, P5781 CAPLUS
- (13) Kim, B; Polymer 2000, V41, P1325 CAPLUS
- (14) Miyamoto, Y; New Polym Mater 1990, V2, P1
- (15) Peppel, W; Ind Eng Chem 1958, V50, P767 CAPLUS
- (16) Rokicki, G; Monat Chem 1984, V115, P205 CAPLUS
- (17) Shimada, E; Jpn Display 1992, V92, P699
- (18) Smith, G; Mol Cryst Liq Cryst 1990, V180, P201

REFERENCE 8

AN 135:144747 CA
TI Manufacturing method for multilayer fluorescent information carriers
IN Dorozhkina, Galina; Kiryusheva, Irina; Levich, Eugene; Lezhnev, Alexey;
Pebalk, Dmitry
PA Trid Store Ip, Llc, USA
SO PCT Int. Appl., 34 pp.
CODEN: PIXXD2
DT Patent
LA English
IC B29C065-00; B29D017-00; G11B007-24; G11B007-26; B32B031-04

CC 74-12 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

Section cross-reference(s): 38

FAN. CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001053065	A1	20010726	WO 2001-US1573	20010118
	WO 2001053065	C2	20021017		
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
	AU 2001032837	A5	20010731	AU 2001-32837	20010118
	US 2001048977	A1	20011206	US 2001-761647	20010118
PRAI	US 2000-176294P		20000118		
	WO 2001-US1573		20010118		
AB	An information layer for an optical information storage medium is formed in a centrifuge. A photopolymerizable compn. is applied to a solid base having a relief pattern, and a flexible, transparent film layer is applied on top of the compn. The three are spun in a centrifuge to cause a thin, even distribution of the photopolymerizable compn., which is photopolymd. The resulting replica is sepd. from the relief pattern and has a fluorescent material applied thereto. Alternatively, the replica has a non-fluorescent material applied, and the non-fluorescent material is made fluorescent through diffusion. Multiple information layers thus formed can be glued together to form a multilayer optical information storage medium.				
ST	optical information storage fluorescent medium manuf photopolymerizable compn; fluorescent information carrier optical information storage medium photopolymerizable compn				
IT	Optical memory devices (multilayer fluorescent information carriers comprising photopolymerizable compn. for optical information storage medium)				
IT	Polycarbonates, processes Polyesters, processes Polyvinyl acetals RL: PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses) (multilayer fluorescent information carriers comprising photopolymerizable compn. for optical information storage medium)				
IT	Polymerization (photopolymn.; multilayer fluorescent information carriers comprising photopolymerizable compn. for optical information storage medium)				
IT	548-24-3 RL: CAT (Catalyst use); USES (Uses) (Eosin B, photoinitiator; multilayer fluorescent information carriers comprising photopolymerizable compn. for optical information storage medium)				
IT	94-36-0, Benzoyl peroxide, uses 7473-98-5, Irgacure 1173 24650-42-8, Irgacure 651 32760-80-8, Irgacure 261 118690-08-7, Irgacure 500 174285-64-4, Irgacure 1700 351458-57-6, Irgacure 149 RL: CAT (Catalyst use); USES (Uses) (multilayer fluorescent information carriers comprising photopolymerizable compn. for optical information storage medium)				
IT	64-17-5, Ethanol, uses 67-63-0, 2-Propanol, uses RL: NUU (Other use, unclassified); USES (Uses) (multilayer fluorescent information carriers comprising photopolymerizable compn. for optical information storage medium)				
IT	106-91-2D, polymers with epoxy compds. and vinyl acetals 989-38-8, Rhodamine 6G 2386-87-0D, polymers with epoxy compds., polycaprolactones				

and polyvinyl acetals 5493-45-8D, polymers with epoxy compds.
 9003-01-4, Polyacrylic acid 25053-96-7D, polymers with epoxy compds.
 25248-42-4D, polycaprolactone sru, thio derivs., polymers with epoxy
 compds. 47367-75-9, oxazine 1 53518-18-6, coumarin 153 55804-66-5,
 coumarin 314 55804-67-6, coumarin 334 131083-16-4, pyrromethene 567
 351446-83-8 351446-84-9 351446-86-1 351446-87-2 351446-88-3
 351446-90-7 351446-91-8D, polymers with polyvinyl acetals 351458-58-7
 351458-59-8 351458-60-1 351458-62-3

RL: PEP (Physical, engineering or chemical process); TEM (Technical or
 engineered material use); PROC (Process); USES (Uses)

(multilayer fluorescent information carriers comprising
 photopolymerizable compn. for optical information storage medium)

IT 84-11-7, Phenanthrenequinone 102-71-6, Triethanolamine, uses 613-29-6,
 Dibutylaniline 10373-78-1, Camphorquinone

RL: CAT (Catalyst use); USES (Uses)

(photoinitiator; multilayer fluorescent information carriers comprising
 photopolymerizable compn. for optical information storage medium)

IT 71-36-3, 1-Butanol, uses 76-37-9, 2,2,3,3-Tetrafluoro-1-propanol
 78-93-3, Methyl ethyl ketone, uses 108-94-1, Cyclohexanone, uses
 110-80-5, 2-Ethoxyethanol 123-42-2, 4-Hydroxy-4-methyl-2-pentanone
 355-80-6, 2,2,3,3,4,4,5,5-Octafluoro-1-pentanol 563-80-4,
 3-Methyl-2-butanone 13019-20-0, 2-Methyl-3-heptanone 20825-07-4,
 1,1,1,5,5,6,6,6-Octafluoro-2,4-hexanedione 127256-73-9,
 1,1,1,3,3,4,4,4-Octafluoro-2-butanol

RL: NUU (Other use, unclassified); USES (Uses)

(solvent; multilayer fluorescent information carriers comprising
 photopolymerizable compn. for optical information storage medium)

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD

- (1) Ciba Geigy AG; EP 0913444 A 1999 CAPLUS
- (2) Glushko, B; WO 9850914 A 1998
- (3) Glushko, B; WO 9923652 A 1999 CAPLUS
- (4) Hong, G; US 5688447 A 1997

REFERENCE 9

AN 135:62368 CA

TI Crosslinkable alicyclic olefin polymer compositions and multilayer circuit
 boards using them

IN Wakisaka, Yasuhiro; Kato, Takeyoshi; Kurakata, Hiroshi

PA Nippon Zeon Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 16 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM C08L065-00

ICS C08L045-00; C08L063-00; H05K003-46

CC 38-3 (Plastics Fabrication and Uses)

Section cross-reference(s): 76

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2001172477	A2	20010626	JP 1999-360323	19991220
PRAI	JP 1999-360323		19991220		

AB The compns., useful for elec. insulators, comprise alicyclic olefin
 polymers, curing agents, and liq. epoxy resins. Thus, applying a compn.
 comprising hydrogenated and maleated tetracyclododecene-8-
 methyltetracyclododecene copolymer, bromine-contg. bisphenol A epoxy resin
 (Araldite AER 8049), dibromocresyl glycidyl ether, and other additives on
 a polyethylene naphthalate film (Teonex), laminating with a PET film,
 further laminating on a circuit board, releasing the PET film, sputtering
 Cu on the laminate, masking, and developing gave a printed circuit board
 showing no air bubble in layers, no interlayer delamination, and good
 elec. resistivity, heat and chem. resistance.

ST alicyclic olefin polymer epoxy elec insulator; multilayer printed circuit
 board polycycloolefin insulator; tetracyclododecene polymer dibromocresyl

- epoxy circuit board
- IT Epoxy resins, uses
RL: DEV (Device component use); IMF (Industrial manufacture); PRP (Properties); PREP (Preparation); USES (Uses)
(bisphenol F-based, reaction products with hydrogenated and maleated alicyclic olefin polymers epoxy resins; crosslinkable alicyclic olefin polymer compns. for insulation layers of multilayer printed circuit boards)
- IT Electric insulators
(crosslinkable alicyclic olefin polymer compns. for insulation layers of multilayer printed circuit boards)
- IT Epoxy resins, uses
RL: DEV (Device component use); IMF (Industrial manufacture); PRP (Properties); PREP (Preparation); USES (Uses)
(crosslinkable alicyclic olefin polymer compns. for insulation layers of multilayer printed circuit boards)
- IT Polyesters, uses
RL: DEV (Device component use); PRP (Properties); USES (Uses)
(films, laminating insulation compns. with; crosslinkable alicyclic olefin polymer compns. for insulation layers of multilayer printed circuit boards)
- IT Polyalkenamers
RL: DEV (Device component use); IMF (Industrial manufacture); PRP (Properties); PREP (Preparation); USES (Uses)
(hydrogenated, maleated; crosslinkable alicyclic olefin polymer compns. for insulation layers of multilayer printed circuit boards)
- IT Printed circuit boards
(multilayer; crosslinkable alicyclic olefin polymer compns. for insulation layers of multilayer printed circuit boards)
- IT Cycloalkenes
RL: DEV (Device component use); IMF (Industrial manufacture); PRP (Properties); PREP (Preparation); USES (Uses)
(polymers, by ring-opening polymn.; crosslinkable alicyclic olefin polymer compns. for insulation layers of multilayer printed circuit boards)
- IT 5493-45-8DP, Hexahydrophthalic acid diglycidyl ester, reaction products with hydrogenated and maleated alicyclic olefin polymers epoxy resins
26874-12-4DP, hydrogenated, maleated, reaction products with epoxy resins
30171-80-3DP, Dibromocresyl glycidyl ether, reaction products with hydrogenated and maleated alicyclic olefin polymers epoxy resins
33294-14-3DP, Araldite AER 8049, reaction products with hydrogenated and maleated alicyclic olefin polymers epoxy resins
RL: DEV (Device component use); IMF (Industrial manufacture); PRP (Properties); PREP (Preparation); USES (Uses)
(crosslinkable alicyclic olefin polymer compns. for insulation layers of multilayer printed circuit boards)
- IT 7440-50-8, Copper, uses
RL: DEV (Device component use); PRP (Properties); USES (Uses)
(crosslinkable alicyclic olefin polymer compns. for insulation layers of multilayer printed circuit boards)
- IT 24968-11-4, Teonex 25230-87-9
RL: DEV (Device component use); PRP (Properties); USES (Uses)
(film, laminating insulation compns. with; crosslinkable alicyclic olefin polymer compns. for insulation layers of multilayer printed circuit boards)

REFERENCE 10

- AN 134:340816 CA
TI Process for glycidation of carboxylic acids
IN Van Noort, Leo Wim; Smits, Jozef Jacobus Titus; Stichter, Hendrik
PA Shell Internationale Research Maatschappij B.V., Neth.
SO PCT Int. Appl., 15 pp.
CODEN: PIXXD2
DT Patent

LA English
 IC ICM C08G059-12
 ICS C07D303-16
 CC 35-2 (Chemistry of Synthetic High Polymers)
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001030881	A1	20010503	WO 2000-EP10628	20001026
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
PRAI	EP 1999-203542		19991027		
AB	Process for the glycidation of carboxylic acids with a halosubstituted monoepoxide is presented in the presence of a base, at 0-110.degree., followed by an dehydrogenation step, characterized on that the base is formed by a alkali metal or alk. earth metal carbonate and/or carbonate H and in the presence of an aprotic dipolar org. solvent, having a static relative dielec. const. of >15 at 25.degree. and a permanent dipole moment of equal to or >2.5 D, during at least the dehydrohalogenation step. Thus, adduct of 1 mol 1,4-dicarboxyl cyclohexane and 2 mol hydroxypivalic acid 84.4, acetonitrile 82, epichlorohydrin 334.4, and water 4.3 g were heated, at 28.degree. K2CO3 is added such that the temp. was 32.degree. within 5 min, 0.31 g benzyltriethylammonium chloride was added, and the mixt. was heated to 78.degree. for 1 h to give a desired product.				
ST	glycidation carboxylic acid dehydrohalogenation				
IT	Dehydrohalogenation				
	(process for glycidation of carboxylic acids)				
IT	Epoxy resins, preparation				
	RL: IMF (Industrial manufacture); PREP (Preparation)				
	(process for glycidation of carboxylic acids)				
IT	27103-66-8P	336882-91-8P	336882-93-0P	337528-44-6P	
	RL: IMF (Industrial manufacture); PREP (Preparation)				
	(process for glycidation of carboxylic acids)				
IT	5493-45-8P	336882-90-7P	336882-92-9P	337528-43-5P	
	RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT				
	(Reactant or reagent)				
	(process for glycidation of carboxylic acids)				
IT	85-42-7, Hexahydrophthalic anhydride	106-89-8, Epichlorohydrin,			
	reactions 57110-29-9, 3-Methyl hexahydrophthalic anhydride 336882-89-4				
	337528-42-4				
	RL: RCT (Reactant); RACT (Reactant or reagent)				
	(process for glycidation of carboxylic acids)				
RE.CNT	9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD				
	(1) Anon; PATENT ABSTRACTS OF JAPAN 1983, V007(053), PC-154				
	(2) Bukowska, A; 2000 CAPLUS				
	(3) Bukowska, A; J CHEM TECHNOL BIOTECHNOL P1145				
	(4) Ciba Geigy Ag; FR 2019170 A 1970 CAPLUS				
	(5) Ciba Geigy Ag; EP 0233843 A 1987 CAPLUS				
	(6) Nissan Kagaku Kogyo Kk; JP 57203066 A 1982 CAPLUS				
	(7) Nitto Denki Kogyo Kk; JP 43018525 B CAPLUS				
	(8) Nordmann, J; US 5218074 A 1993 CAPLUS				
	(9) Snpa; GB 1234571 A 1971				

=> file ca

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

6.49

6.70

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	-0.62	-0.62

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FILE COVERS 1907 - 6 Mar 2003 VOL 138 ISS 11
 FILE LAST UPDATED: 6 Mar 2003 (20030306/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

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FILE 'REGISTRY' ENTERED AT 10:42:48 ON 10 MAR 2003

L1 1 S 5493-45-8

FILE 'CA' ENTERED AT 10:43:42 ON 10 MAR 2003

=> s l1 and photo?

190 L1

1135816 PHOTO?

L2 26 L1 AND PHOTO?

=> s l2 and diluent

22436 DILUENT

L3 2 L2 AND DILUENT

=> d all 1-2

L3 ANSWER 1 OF 2 CA COPYRIGHT 2003 ACS
 AN 132:138896 CA
 TI UV-curable epoxy silicone release coating composition
 IN Kline, James R.
 PA Monarch Marking Systems, Inc., USA
 SO U.S., 7 pp.
 CODEN: USXXAM
 DT Patent
 LA English
 IC ICM G09F003-00
 ICS B32B027-16; B32B027-20; C08K003-36; C08K002-48
 NCL 283081000
 CC 42-10 (Coatings, Inks, and Related Products)
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----		-----	-----	-----
PI	US 6022050	A	20000208	US 1998-145514	19980902
	US 6231922	B1	20010515	US 1999-465087	19991216

PRAI US 1998-145514 A1 19980902

AB A release coating compn. contains .apprx.50-75% epoxy functional silicone, .apprx.8-25% reactive solvent, .apprx.5-25% reactive **diluent**, .apprx.6-12% wax-treated SiO2 powder, and .apprx.2-4% **photoinitiator**. The compn. is useful in prepg. a low-gloss release coating for use on linerless labels. Thus, an example coating contained UV-9500 62, Pr alc. 15, 1,4-cyclohexanedimethanol divinyl ether 10, Syloid 7000 10, and iodonium salt **photoinitiator** 3%. These compns. (a) do not adhere to the pressure sensitive adhesive; (b) do not inhibit the ability for subsequent imaging of the underlying thermal sensitive coating; and (c) are of sufficiently low gloss such that the bar codes can be read via electronic means.

ST epoxy silicone release coating; low gloss release coating; UV curable release coating

IT Polysiloxanes, uses

RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)

(di-Me, Me 2-(7-oxabicyclo[4.1.0]hept-3-yl)ethyl, [[dimethyl[2-(7-oxabicyclo[4.1.0]hept-3-yl)ethyl]silyl]oxy]-terminated; silicone low-gloss release coating compn. for on linerless labels)

IT Phenolic resins, uses

RL: TEM (Technical or engineered material use); USES (Uses)

(epoxy, novolak, **diluent**; silicone low-gloss release coating compn. for on linerless labels)

IT Epoxy resins, uses

RL: TEM (Technical or engineered material use); USES (Uses)

(phenolic, novolak, **diluent**; silicone low-gloss release coating compn. for on linerless labels)

IT Release coatings

(silicone low-gloss release coating compn. for on linerless labels)

IT 71-23-8, n-Propyl alcohol, uses 71-36-3, n-Butyl alcohol, uses 71-41-0, Amyl alcohol, uses 78-83-1, Isobutyl alcohol, uses 78-92-2, sec-Butyl alcohol 108-93-0, Cyclohexanol, uses 111-27-3, n-Hexanol, uses 1675-54-3 2386-87-0, 3,4-Epoxy-cyclohexylmethyl-3,4-epoxy-cyclohexane carboxylate 3130-19-6, Bis(3,4-epoxycyclohexyl-methyl)adipate 3388-03-2 **5493-45-8** 7195-45-1, Phthalic acid diglycidyl ester 17351-75-6 54972-97-3, Methyl amyl alcohol

RL: TEM (Technical or engineered material use); USES (Uses)

(**diluent**; silicone low-gloss release coating compn. for on linerless labels)

IT 7631-86-9, Silica, uses

RL: MOA (Modifier or additive use); USES (Uses)

(filler; silicone low-gloss release coating compn. for on linerless labels)

IT 156623-20-0D, Dimethylsilanediol-glycidoxypropylmethylsilanediol copolymer, trimethylsilyl-terminated

RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)

(silicone low-gloss release coating compn. for on linerless labels)

RE.CNT 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Anon; WO 9707985 1997 CA
- (2) Becker; US 5631042 1997 CA
- (3) Birkholz; US 5663227 1997 CA
- (4) Brack; US 3989609 1976 CA
- (5) Carlblom; US 4229274 1980 CA
- (6) Ebbrecht; US 5494979 1996 CA
- (7) Khatib; US 5621020 1997 CA
- (8) Kidon; US 5494945 1996 CA
- (9) Leir; US 5286815 1994 CA
- (10) Mitchell; US 5354588 1994
- (11) Mitchell; US 5547738 1996
- (12) Mitchell; US 5651852 1997
- (13) Mitchell; US 5658661 1997
- (14) Ooms; US 5942557 1999 CA

- (15) Rice; US 5569515 1996 CA
 (16) Satas; Handbook of Pressure-Sensitive Adhesive Technology, Chapter 17
 1982, P37
 (17) Sinka; US 4417023 1983 CA
 (18) Stenzel; US 5292713 1994

L3 ANSWER 2 OF 2 CA COPYRIGHT 2003 ACS

AN 125:198763 CA

TI UV-hardenable ink for indirect-relief printing and nonrelief printing

IN Seng, Hans-Peter

PA Druckfarbenfabrik Gebr. Schmidt Gmbh, Germany

SO Ger. Offen., 7 pp.

CODEN: GWXXBX

DT Patent

LA German

IC ICM C09D011-10

ICS D06P001-52; B41M001-00

ICA C08G059-68

CC 42-12 (Coatings, Inks, and Related Products)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 19500968	A1	19960718	DE 1995-19500968	19950114
	WO 9621702	A1	19960718	WO 1995-DE1872	19951227
	W: US				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	EP 802954	A1	19971029	EP 1995-942052	19951227
	R: AT, BE, CH, DE, FR, GB, LI, NL				
PRAI	DE 1995-19500968		19950114		
	WO 1995-DE1872		19951227		
AB	Low-viscosity inks for the title processes contain components that cationically crosslink/polymerize in the presence of UV light. Preferably the inks contain (a) 10-80% (based on total) .gtoreq.1 cationically crosslinkable epoxy resin, (b) 0.5-30% (based on total) photoinitiator for cationic crosslinking/polymg., (c) 0-65% [based on (b)] stabilizer for (b) that acts as a solubilizer for (b), (d) 0-50% (based on total) pigment and(or) dye, (e) .ltoreq.5% photoinitiator for radical crosslinking/polymg., (f) .ltoreq.30% (based on total) diluent , (g) .ltoreq.5% (based on total) wax, (h) .ltoreq.2% (based on total) flow-control agent, (i) wetting agent, and (j) .ltoreq.5% (based on total) additives.				
ST	UV cationically crosslinkable printing ink; epoxy UV crosslinkable printing ink				
IT	Epoxy resins, uses				
	RL: TEM (Technical or engineered material use); USES (Uses) (cationically crosslinkable; UV and cationically hardenable ink for indirect-relief printing and nonrelief printing)				
IT	Sulfonium compounds				
	RL: CAT (Catalyst use); USES (Uses) (arene, photoinitiators ; UV and cationically hardenable ink for indirect-relief printing and nonrelief printing)				
IT	Onium compounds				
	RL: CAT (Catalyst use); USES (Uses) (iodonium, aryl, photoinitiators ; UV and cationically hardenable ink for indirect-relief printing and nonrelief printing)				
IT	Inks				
	(printing, UV-curable, UV and cationically hardenable ink for indirect-relief printing and nonrelief printing)				
IT	96-08-2, Limonene dioxide 106-86-5, 1-Vinyl-3,4-epoxycyclohexane 1195-92-2, Limonene epoxide 4292-90-4 5493-45-8 , Diglycidyl hexahydrophthalate 25085-98-7, Cyacure UVR 6110 68924-34-5				
	RL: TEM (Technical or engineered material use); USES (Uses) (UV and cationically hardenable ink for indirect-relief printing and nonrelief printing)				
IT	57835-99-1, Triphenylsulfonium hexafluorophosphate 57840-38-7,				

Triphenylsulfonium hexafluoroantimonate 82184-29-0, UV 9310C
RL: CAT (Catalyst use); USES (Uses)
(**photoinitiator**; UV and cationically hardenable ink for
indirect-relief printing and nonrelief printing)

=> log y

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

9.66

16.36

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

ENTRY

SESSION

CA SUBSCRIBER PRICE

-1.24

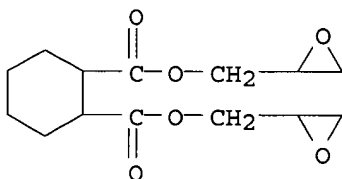
-1.86

STN INTERNATIONAL LOGOFF AT 10:45:18 ON 10 MAR 2003

L1 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS
 RN 5493-45-8 REGISTRY
 CN 1,2-Cyclohexanedicarboxylic acid, bis(oxiranylmethyl) ester (9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN 1,2-Cyclohexanedicarboxylic acid, bis(2,3-epoxypropyl) ester (7CI, 8CI)
 CN 1-Propanol, 2,3-epoxy-, 1,2-cyclohexanedicarboxylate (2:1) (8CI)
 OTHER NAMES:
 CN Bis(2,3-epoxypropyl) 1,2-cyclohexanedicarboxylate
 CN Diglycidyl 1,2-cyclohexanedicarboxylate
 CN Diglycidyl hexahydrophthalate
 CN Hexahydrophthalic acid diglycidyl ester
 FS 3D CONCORD
 MF C14 H20 O6
 CI COM
 LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS, CHEMCATS, CHEMLIST, CSCHEM, CSNB, IFICDB, IFIPAT, IFIUDB, MEDLINE, MSDS-OHS, PROMT, RTECS*, TOXCENTER, USPATFULL
 (*File contains numerically searchable property data)
 Other Sources: DSL**, EINECS**, TSCA**
 (**Enter CHEMLIST File for up-to-date regulatory information)

Ring System Data

Elemental Analysis EA	Elemental Sequence ES	Size of the Rings SZ	Ring System Formula RF	Ring Identifier RID	RID Occurrence Count
C2O	OC2	3	C2O	1.30.1	2
C6	C6	6	C6	46.150.1	1



Calculated Properties (CALC)

PROPERTY (CODE)	VALUE	CONDITION	NOTE
Bioconc. Factor (BCF)	10.7	pH 1	(1) ACD
Bioconc. Factor (BCF)	10.7	pH 4	(1) ACD
Bioconc. Factor (BCF)	10.7	pH 7	(1) ACD
Bioconc. Factor (BCF)	10.7	pH 8	(1) ACD
Bioconc. Factor (BCF)	10.7	pH 10	(1) ACD
Boiling Point (BP)	412.6+/-30.0 deg C	760.0 Torr	(1) ACD
Enthalpy of Vap. (HVP)	66.52+/-3.0 kJ/mol		(1) ACD
Flash Point (FP)	183.3+/-44.3 deg C		(1) ACD
H acceptors (HAC)	6		(1) ACD
H donors (HD)	0		(1) ACD
Koc (KOC)	190	pH 1	(1) ACD
Koc (KOC)	190	pH 4	(1) ACD

Koc (KOC)	190	pH 7	(1) ACD
Koc (KOC)	190	pH 8	(1) ACD
Koc (KOC)	190	pH 10	(1) ACD
logD (LOGD)	1.66	pH 1	(1) ACD
logD (LOGD)	1.66	pH 4	(1) ACD
logD (LOGD)	1.66	pH 7	(1) ACD
logD (LOGD)	1.66	pH 8	(1) ACD
logD (LOGD)	1.66	pH 10	(1) ACD
logP (LOGP)	1.659+/-0.492		(1) ACD
Molar Solubility (SLB.MOL)	<0.01 mol/L	pH 1	(1) ACD
Molar Solubility (SLB.MOL)	<0.01 mol/L	pH 4	(1) ACD
Molar Solubility (SLB.MOL)	<0.01 mol/L	pH 7	(1) ACD
Molar Solubility (SLB.MOL)	<0.01 mol/L	pH 8	(1) ACD
Molar Solubility (SLB.MOL)	<0.01 mol/L	pH 10	(1) ACD
Molecular Weight (MW)	284.30		(1) ACD
Vapor Pressure (VP)	5.12E-07 Torr	25.0 deg C	(1) ACD

(1) Calculated using Advanced Chemistry Development (ACD) Software Solaris V4.67 ((C) 1994-2003 ACD)

190 REFERENCES IN FILE CA (1962 TO DATE)
 39 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 190 REFERENCES IN FILE CAPLUS (1962 TO DATE)
 2 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1